

DOCUMENT RESUME

ED 090 099

SO 007 305

AUTHOR Jelinek, James John, Ed.
TITLE Philosophy of Education, 1973-1974.
INSTITUTION Far Western Philosophy of Education Society.
PUB DATE 73
NOTE 253p.; Proceeding of the Annual Meeting of the Far Western Philosophy of Education Society (22nd, San Francisco, California, December 7-8, 1973)

EDRS PRICE MF-\$0.75 HC-\$12.60 PLUS POSTAGE
DESCRIPTORS Aesthetic Education; Behavioral Objectives; Conference Reports; Democratic Values; Educational Administration; Educational Attitudes; *Educational Philosophy; *Educational Theories; *Futures (of Society); Moral Values; *Philosophy; Social Change; *Social Sciences; Values

ABSTRACT

The compiled proceedings of an annual meeting of the Far Western Philosophy of Education Society focus on the theme of the future. A presidential address suggests definitions of "future" and investigates how philosophy of education professionals can participate and contribute to futures. Several of the twenty-four papers, all reproduced with documentation, relate directly to the future of educational philosophy in relation to such areas as the social sciences, educational administration, behavioral objectives, and social change. Others are more indirectly concerned with the future and concentrate more on the behavioristic approach to education, on the nature of reading, or on cultural symbolism. Another group of papers deals with values, moral reasoning, and ethics in regard to science, aesthetics, education in general, and to state guidelines in these areas. Considerations of democratic values in connection with political and industrial education are the subject of two of the papers. Names of officers and a history of the society are appended, as is the meeting program. (Author/KS')

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

PERMISSION TO REPRODUCE THIS COPY.
RIGHTED MATERIAL HAS BEEN GRANTED BY

*James John Go/rieko
James G. Van Patten*

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE NATIONAL IN-
STITUTE OF EDUCATION. FURTHER REPRO-
DUCTION OUTSIDE THE ERIC SYSTEM RE-
QUIRES PERMISSION OF THE COPYRIGHT
OWNER.

PHILOSOPHY OF EDUCATION 1973-1974

EDITOR

JAMES J. JELINEK

Professor

Arizona State University
Tempe, Arizona 85281

PLATO

ED 090099

SP DD7305

PHILOSOPHY OF EDUCATION
1973-1974

PROCEEDINGS OF THE TWENTY-SECOND ANNUAL MEETING OF THE FAR WESTERN
PHILOSOPHY OF EDUCATION SOCIETY IN SAN FRANCISCO,
CALIFORNIA, DECEMBER 7-8,
1973

JAMES JOHN JELINEK
ARIZONA STATE UNIVERSITY,
EDITOR

PUBLISHED BY THE FAR WESTERN PHILOSOPHY OF EDUCATION SOCIETY,
C/O DR. JAMES JOHN JELINEK, PROFESSOR OF EDUCATION,
COLLEGE OF EDUCATION, ARIZONA STATE
UNIVERSITY, TEMPE, ARIZONA
85281

Copyright
1974
by
Far Western Philosophy of Education Society

The Typesetting, Printing, and Binding of this Book was Done by the
Bureau of Publications, Arizona State University,
Tempe, Arizona

CONTENTS

Section	Page
I. The Future of Philosophy of Education: Overcoming the American Way. Hugh C. Black	1
Discussion. F. A. Guerard, et al	15
II. A Futurological Analysis of Exosomaticism: Basic Relationships Between Futurology, Philosophy, and Education. James John Jelinek	21
III. The Future of Educational Philosophy and the Rise of Social Science. James Romig	37
IV. The Illusion of the Future. William H. McGowan	45
V. Much of the Future Will be Like the Past. Jack Pitt	53
VI. The Future: Assumptions and Conditions of Meaning. Joseph Engle	61
VII. Magister Ludi for the Twenty-first Century. Bernice Goldmark	71
VIII. Philosophical Guidelines on the Future Educational Administration. Lawrence L. Kavich	85
IX. Educational Philosophy: Some Cautionary Notes and Qualifications. William F. O'Neill	93
X. Analytic Responsibility: Ours or Theirs. Robert Joseph Rossi	105
XI. Behavioristic Eclecticism: A Deleterious Antithesis to Educational Philosophy. Morris L. Bigge	113
XII. Taxonomizing Educational Objectives: Some Questions about the Approach of Benjamin Bloom and Associates. Maurice P. Hunt	127
XIII. Idealism: A Clarification of an Educational Philosophy. John Paul Strain	135
XIV. Ethics, Reality, and Education: The Parmenidean Error. Leonard Fels	147

XV.	Martin Buber and the One-Sided Dialogical Relation. Donald S. Seckinger	155
XVI.	Symboling: Thinking, Culture, and Alternative Assessment. Colleen S. Decker	163
XVII.	Reading as a Semantic and Epistemological Problem: Implications of Certain Basic Assumptions about the Nature of Reading. John B. Connely	181
XVIII.	Textbooks and Teaching Democracy: Political Education and Indoctrination. Lawrence W. Byrnes	189
XIX.	Value Considerations in the Science Education. Robert Bruce McLaren	197
XX.	The Limits of the Model of Relativity by Physics for Understanding Educational Philosophy. Darold R. Beckman	211
XXI.	Industrial Education and Democracy. Samuel Burkhard	219
XXII.	Moral and Aesthetic Reasoning. Michael J. Parsons	229
XXIII.	The Development of the Capacity for Aesthetic Reaction through Autonomous Choice. Catharine Phillips Fels	239
XXIV.	State Guidelines and Moral Education. Don Cochrane	247
XXV.	Presidential Address: Futures -- A Procedural Question. T. Frank Saunders	259
	Response. John J. O'Farrell	267
	APPENDICES	273
	A. Officers	275
	B. History	277
	C. Program	281

Cover. James John Jelinek.

SECTION I
THE FUTURE OF PHILOSOPHY OF EDUCATION:
OVERCOMING THE AMERICAN WAY

HUGH C. BLACK

The best future for philosophy of education in the United States, I maintain, is to build better on the foundations of what we already know. And that means overcoming our usual practices: "The American Way".

This first part of our Far Western Twenty-second Annual Meeting is intended as a trying-out of that belief. For here is something new in the Far Western Philosophy of Education Society: a part of the program devoted to the discussion of an article which has already been published. The past three years our "practice" has been to discuss original, unpublished articles circulated to the membership in mimeographed form in advance of the annual meeting. Moreover, I am initiating the discussion session which follows not with the usual five-minute summary but with this brief presentation of Supplementary Materials to Spark the Discussion of my article "The Relevancy of Teaching Philosophy of Education" which was previously published in Journal of Thought, 8 (No. 1, January 1973): 65-73, and has been distributed to each member prior to this meeting. This is something new in F.W.P.E.S., but it is based on knowledge of a past practice of twenty years ago in The Southwestern Philosophy of Education Society which was brought to your attention in the first Newsletter of F.W.P.E.S. just this past March.

Here I am wondering about changing our ways in philosophy of education as James Reston wondered about changing our American habit in his newspaper column of August 26, 1973. "In every great crisis of violence or corruption in our national life," he wrote from Washington, "Americans tend either to turn away from it in cynicism or blame it on the moral decline of the nation as a whole. It's an old American habit: We either forget or bleed." Reston, as I also intend here, voiced the hope for a new possibility when he wrote: "Still, at the beginning of a new school year, when even Washington is just getting the first sweep of cool clear autumnal air, one wonders whether we couldn't have a little more honest discussion in America about how all these strange things happened, and what, if anything, they mean about our values and purposes."

The time has come in philosophy of education when we must do better. We may best spring forward, I suggest, by falling back on that available knowledge which will enable us to overcome our usual educational habits. In education we are always bleeding because we do forget. We disparage knowledge -- the very knowledge on which our salvation or survival may depend. We proceed one-sidedly still, emphasizing some one aspect of what education is, each knight-errant running the squirrel-cage treadmill of professional power politics and self-aggrandizement by touting his own panacea -- "blowing his own gum" -- to the exclusion of

all other possibilities. So often we fall into our tragedies because we fail to act on the knowledge expressed by Dewey over twenty-one years ago: that so many of the "new" panaceas are in fact disguised old ones. Our educational tragedies become compounded when we continue to practice our habit of being "scoffers at knowledge".

We must not turn away, I insist, from the wisdom in John Dewey's 1916 pronouncement about "the weightiest problem with which the philosophy of education has to cope": keeping a proper balance between the two realities of "the informal and the formal, the incidental and the intentional, modes of education". Why? Because it is too often our habit -- the American Way -- to treat any appeal for a balanced, "whole" view of education with the cold shoulder of indifference or the delight of the scoffer who exclaims: "Old Hat! We've heard that before. EXISTENTIALLY things are somewhat different NOW! Forget that old stuff!" My plea is for a better hearing for all knowledge resources which enlighten us about living and educating, including more balanced views of what education is.

To illustrate my plea more vividly I draw on one knowledge resource I hope we shall use more as philosophers of education advance into the future: literature, even fictional novels. In Arthur Koestler's 1973 Random House novel entitled The Call Girls: A Tragi-Comedy I find in the response of "The Call Girls" to the character Bruno what, pessimistically, I forecast shall happen but what, optimistically, I hope we shall overcome in the philosophy of education of the future. In Koestler's story Niko Solovief had arranged an international symposium of "Call Girls" on the vital topic "Approaches to Survival". "Call Girls" are academic specialists of international fame who attend such affairs in response to a long-distance call from some professional busybody or foundation or university offering travel expenses or a modest honorarium for their services. At one point in the story (pp. 101-102), Bruno reminded the other "Call Girls" of his modest contributions to the opening discussion. The two speakers of the morning, he said, had described the predicament of mankind in general in eloquent terms. But their descriptions were biased, portraying not the whole but the slant of each participant. Moreover, they failed to include in the general picture the particular conflicts of the moment which make man's general predicament so acute. Claire's account of Bruno's plea is instructive: ". . . taking into consideration both the long-term problems and the acute crises, it seemed to him more important than ever to keep a cool head and arrive at judgments and recommendations . . . which struck a measured balance between detached reasoning and vigorous action." And what was the response to this plea for a balanced view? "Solovief [the

chairman] rapped the table. 'Excuse me, Bruno, but you have said all this during our first discussion.' . . . They all had a feeling of déjà vu." (p. 102). That, I am afraid, will be the same kind of reception any plea, such as Dewey's old one, for a balanced view of education will receive from philosophers of education in the future, as in the past. That attitude, I insist, must be overcome.

Koestler's novel instructs us further about the habits American philosophers of education must overcome in the future. His novel centers on the crisis situation of Man's predicament in which his very survival requires a specific recommendation based upon knowledge of what ails Man. The search is for a method of eliminating the schizophrenic condition reflected in Man's history, for knowledge of how to reconcile the separate and hostile domains of passion and reason (p. 104). Yet the specialist's slant and bias of each of the Call Girls added only small bits and pieces to the greater jigsaw, not adding up to much about what ails Man. We are instructed by this part of the letter by Claire, wife of Niko Solovief, the chairman, to her friend Guido:

. . . Niko is blaming himself for having selected the wrong people, . . . He wanted to avoid the stuffed shirts, complacent establishment pundits, and collect the more lively ones among the international Call Girl set, known for their provocative ideas. When you read their stuff or get them alone in a relaxed mood, you realize their qualities -- but the moment you put them together in a conference room, they behave like school boys performing a solemn play. They are worse than politicians, because politicians are ham actors by natural disposition, whereas most academics seem to suffer from arrested emotional development. Politicians take their pride in making impassioned speeches and indulging in rhetorical flights; scientists pose as dispassionate servants of Truth, free from all emotional bias, while ambition and jealousy steadily gnaw away their entrails. And what is their truth, caro Guido, what is Truth? It seems to me that each of them possesses a small fragment of the Truth which he believes to be the Whole Truth, which he carries around in his pocket like a tarnished bubble gum, and blows up on solemn occasions to prove that it contains the ultimate mystery of the universe. Discussion? Interdisciplinary dialogue? There is no such thing, except on the printed program. When the dialogue is supposed to start, each gets his own bubble gum out and blows it into the others' faces. Then they repair, satisfied, to the cocktail room.

Take our dear Otto von Halder, of international fame, who was blowing his gum this morning. It was a re-hash of his latest book, . . . I suppose there is a grain of truth in his ideas -- the simple little truth that letting steam off is better than overheating the boiler. It is almost a truism, but he blew it until it became inflated into a grotesque kind of religion, . . .

The discussion was a mess, as the previous ones had been . . .

It is all very frustrating. I feel sorry for Niko. He foresaw it, of course, in the cynical half of his divided heart; in the other half he keeps a niche for miracles. So far none have transpired . . . (pp. 94-95).

This description from Koestler's novel sounds very much to me like the usual American habit and way in philosophy of education. Can we have the teaching of a relevant philosophy of education which sees education "steadily and as a whole" -- the miracle which might yet come -- or shall we continue, each of us, to blow his gum, emphasizing only our special part of the whole which might yet be? And with this promise what shall we do with the paradox I face: as a specialist in philosophy of education, I am, after all, blowing my own gum of the generalist's position, of the balanced view? My knowledge of the past answers at this point only with the wisdom that each of us in philosophy of education must advance into the future with better convictions, each blowing his own gum even better than previously, but with even greater toleration of other gum blowers and a willingness to give others a hearing, especially those with a balanced view of what education might become.

The Relevancy of Teaching Philosophy of Education (1)

To the manifold problems of life and education in the 1970s, teachers of philosophy of education who bring to bear relevant insights, knowledge, and wisdom from philosophy and philosophy of education serve well and worthily our society. The outcome of years of experience with fine students, this judgment challenges the numerous surveys of the opinions of teachers and administrators about their preparation in which they have generally assigned low ratings to courses in the history and philosophy of education. It refutes also the student belief: "This has

to do with the past, and it is not relevant to teaching in today's schools!" It is confirmed in recent writings setting forth the grounds for judging our relevancy: whether what we do is coherent with what Harry S. Broudy in 1972 called THE REAL WORLD OF THE PUBLIC SCHOOLS. My purpose is to share this heartening confirmation of what philosophy of education has been for some and might be for many.

In our modern technological society genuine concern for the education of the young must be expressed through judgments of professionals whose expertise is based on the "best" knowledge available. The need making philosophy of education courses relevant is for knowledge of more balanced, mediated theories of education to replace the extreme views so popular today. This reality Broudy expressed well when he wrote: "The impatience with study, with mastery, with induction into the cultural heritage, with structure and order of any kind; the rush to immediate gratification, the instant job, the heightening of any and every experience -- these do not get the young ready for the demands of modern life" (p. 172). Joseph Featherstone's plea for tempering the open school fad represents an about-face affording further confirmation. His 1967 articles in THE NEW REPUBLIC publicized for his American audience the informal, open, and free schools of the British. But by September 1971 Featherstone entitled the second of his new articles on open schools: "Tempering the Open School Fad." Jerome Bruner also points to the need for original foresight rather than belated hindsight. After ten years, he "revisited" in September 1971 his influential and popular book of the 1960s THE PROCESS OF EDUCATION. The hindsight he shared with his PHI DELTA KAPPAN readers was: "If I had my choice now, in terms of a curriculum project for the seventies, it would be to find a means whereby we could bring society back to its sense of values and priorities in life." Philosophy of education courses, he should know, HAVE been taught with that purpose in mind. They shall continue to be relevant when they contribute that "better" knowledge helping man face his heavy burden of making his frightening choices as he confronts the most fundamental questions of value and purposes -- the need expressed by Charles E. Silberman in his 1970 CRISIS IN THE CLASSROOM.

Relevant teaching of philosophy of education meets both societal and individual needs. It may contribute to a needed broader articulation between the "abrupt and polarizing discontinuities" which separate the "have's" and "have-nots," school and life, and matters of the head and of the heart. So Thomas Sobol, Scarsdale superintendent of schools, expressed for his September 1971 readers of PHI DELTA KAPPAN our need in terms of the culture and counter-culture clash between the value systems of the young and of the older. Sobol shared with his readers a poignant

letter from a 17-year-old to his superintendent stating the youth's need for an education in how to live, to love, to coexist with and relate to other people, and to enhance the quality of life. The youth expressed his need for what has been the perennial concern of philosophers of education: the kind of education which serves his individual needs by equipping him with "the necessary skills to contribute to the building of a humane society, a culture of decency and humanity".

Students, wrote Charles E. Silberman in *CRISIS IN THE CLASSROOM*, are asking "What shall I make of myself?" "Who am I?" "What values do I want to serve?" "To whom, and to what, do I want to be responsible?" Differences of opinion about such questions are forcing teachers and students in philosophy of education courses to take themselves seriously, to ask what they are really doing in school, why they are doing it, and what they could and should do. We need today, as in the past, to face the main questions the great educators have always kept at the center of their concern: "What is education for?" "What kind of human beings and what kind of society do we want to produce?" "What methods of instruction and classroom organization as well as what subject matter, do we need to produce these results?" "What knowledge is of most worth?" "What should be the role of the teacher in today's schools?" The need to answer best such questions makes relevant the teaching of philosophy of education.

Relevant teaching of philosophy of education begins with such existential questions. But the best knowledge resource area of "philosophy" to draw upon is not existentialism. Nor is it linguistic analysis. Rather more helpful is philosophy in the more traditional discipline exemplified by the great philosophers in the history of ideas. Philosophy is presented as the concern of everybody rather than the province of the specialist. For we all, as human beings who have needs and who wonder, should love and pursue wisdom -- one definition of philosophy precious in our western heritage. Amid our wonder, reality for each and all is one of making choices and judgments in the conduct of our lives. Since we all need to answer such questions already raised as "Who am I?" and "What values do I want to serve?" we wonder about the nature of reality, truth, goodness, beauty, and knowledge. Together questing for those perspectives which will BEST satisfy our wonders and enhance our lives, we are caught up in philosophy. Frequently, we are best served by a philosophy which encourages us to forsake the immediate, the particular, and the narrow for the more distant, the long-run, and the broader. For our immediate problems must be seen in their wider contexts and in relationship to what wisdom we have about living. Philosophy is relevant if it better enables us to see our lives "steadily and as a whole" and in that context to make our choices and judgments: in terms of what SHOULD

truly matter in life. Our "better" society requires persons who live active lives of reflective commitment. That is a heavy burden. What do we really know about this necessary business of making judgments about what is good or bad, right or wrong, better or worse, beautiful or ugly? Or is it all a matter of individual opinion, every man having his own and one being as "good" as another's? What and how do we know and know that we know? Philosophy will best serve us if it enlightens us about such questions and helps us lead critically examined lives. For daily we commit ourselves to conduct and behavior on the basis of beliefs and opinions. Which beliefs are truly worthy of our "better" selves and actions, and why? Thus do we require knowledge of "philosophy" in its meaning of "the continuing examination of the basis for our beliefs ABOUT THE NATURE OF REALITY, KNOWLEDGE, TRUTH, GOODNESS, AND BEAUTY".

"Philosophy of education," it seems to me, should be relevant to our students if presented as a similar "love or pursuit of wisdom about the grounds or bases of our beliefs ABOUT EDUCATION". Capitalizing on Socrates, we can say that only critically examined "education" is the "education" worth having. Any "mindlessness" which any Silberman observes in our classrooms must be replaced by serious thinking about educational purposes in terms of the most fundamental questions of value. More persons, in education and who affect education and our culture, must ask WHY we are doing what we are doing in schools and enjoined to pursue wisdom about what we SHOULD be doing. Here again is knowledge available and developing. Here again may the teaching of philosophy of education display its relevance.

Central to philosophy of education is attention to knowledge of theories of education. This knowledge helps us carry our heavy burden of choices and judgments in "education". For it makes available to us knowledge of what are the possibilities in education, what notions or conceptions of education are available to us. Without such knowledge our judgments and choices are limited and our freedoms imperilled. With such knowledge of theories of education we may better judge "aright" what for us education should be and might be. With its disclosure of patterns possible, each teacher and citizen might make "better" judgments and give significant direction to the educational undertakings of our times. In addition to disclosing possible theories of which we may be unaware in our controversies over what education should be, philosophy of education may be so taught as to prevent what Dewey late in life saw as a danger. "The real danger," he wrote in 1952, "is in perpetuating the past under forms that claim to be new but are only disguises of the old." Specifically, philosophy of education may be so taught that our students would catch the vision that the "educational" panaceas of the radical, or romantic, or

compassionate critics of today offer no more -- nor no less -- insight into what education should be in the 1970s than their "Progressive" predecessors in each decade of the 20th century, in the 19th, 18th, and 17th centuries, and even on back to the Sophists of 5th century B.C. Athens. This is a story of varying emphases upon the main aspects of what education is. Its culmination should be encouragement to discern relationships between the varying aspects so as to see education "steadily and as a whole". That insight includes visions of the provincialisms of education, including those of Traditionalism as well as those of Progressivism; and it seeks a balancing, a mediation between extremes in terms of proper relationships of what education is all about. It becomes relevant "philosophy of education" when it so seizes upon extreme emphases as to get us beyond the debilitating battles to something "better" than the "abrupt and polarizing discontinuities" referred to earlier by Sobol and which divide and weaken us as persons and as a society.

Relevant teaching of philosophy of education recognizes the continuity between our imperfect world of education and our best vision of what education might become. This need the late Douglas Morgan expressed in his 1964 LOVE: PLATO, THE BIBLE AND FREUD: that in life we urgently need to live "not merely in the light of what we have been and are, but most importantly of what we may become". So in education we educators as the great "cookie makers" (a beautiful phrase by Morgan in teaching Plato's doctrine of ideas) must fashion out of the amorphous dough of experience a better education by means of more perfect "cookie cutters," or patterns, theories, and ideals of what education ought to be. We need knowledge of proper guiding principles in education. The most relevant teaching of philosophy of education will occur when we go about our business in pursuit of the ideal enunciated by John Dewey in 1938 in concluding EXPERIENCE AND EDUCATION. "What we want and need is education pure and simple," he wrote, "and we shall make surer and faster progress when we devote ourselves to finding out just what education is and what conditions have to be satisfied in order that education may be a reality and not a name or a slogan." This entails facing up to what Dewey termed in 1916 in the first chapter of DEMOCRACY AND EDUCATION as "one of the weightiest problems with which the philosophy of education has to cope": keeping a proper balance between the two realities of "the informal and the formal, the incidental and the intentional, modes of education."

Relevant teaching of philosophy of education thus includes emphasis on opening up to students resources of knowledge, especially in both of the fields mentioned: philosophy and philosophy of education. The objective would be wisdom and a thrust toward overcoming what seems to be the perennial human condition and predicament posed by people who love

being simple, who hate knowledge, and who take delight at scoffing at seekers after knowledge. Long ago Solomon in the first chapter of Proverbs warned of the calamity and panic, the distress and anguish to be visited upon the fools "who despise wisdom and instruction". Enticers said to his son: "Come with us," and Solomon countered with: "My son, do not walk in the way with them, hold back your foot from their paths." So in our day do our actions need the enlightenment of knowledge, instruction, and wisdom. Philosophy of education so taught as to impart a grasp of the "good attained" (from the experiences of living and educating) for "the discovery and establishment of something better" IS relevant!

This suggested approach in philosophy of education of using known goods to achieve something better is most relevant to healing the deep ideological divisions which split us and to helping us make what we do more mindful.

Many persons today, as many in the past, cannot go along with the Solomon approach to life and education. It is too likely, they say (pointing to John's opening statement in the fourth Gospel: "In the beginning was the Word"), to become lifeless, meaningless transmission of "the Word," of inherent essences. One reality of our time is formal schooling in which the older generation (like Solomon) relies on "the Word" about living based on wisdom stemming from the experiences of other human beings distilled into books which can be acquired only through mastery of the skills of abstract, symbolic learning. For many, this educational regimen always runs the risk of learning becoming disassociated from "real" persons living "real" lives in the world of their times. Perennial criticism has described it in terms of "authorities at the upper end handing down to the receivers at the lower end what they must accept". Such schooling, say its critics, does not inform and illumine living; for it is indoctrination and propaganda destructive of the foundations of a democratic society and appropriate only for a totalitarian society. A reality of our times is the popularity of informal schooling in which the younger generation displays little respect for the past or the wisdom of the older generations and seeks to discover through living its own answers to how to live. According to this view, wisdom is to be sought in individual acts of vital living, in the sons NOT holding "back your foot from their paths". "The only true education," wrote Dewey (in EDUCATION TODAY, p. 3), "comes through the stimulation of the child's powers by the demands of the social situation." That is one view or philosophy or theory of education which persists today.

Against Dewey's statement about true education and the social situation there are many others today who would react (and do) as did Sir

Richard Livingstone in his Rede Lecture of 1944, *PLATO AND MODERN EDUCATION*, pp. 16-17. Dewey's is a subtly materialistic doctrine which if true must force us to rewrite the Biblical statement to read: "In the beginning was, not the Word, but the Situation." What a disastrous creed, says Sir Richard. "If it is followed, the child is not likely to be any better than the society of his time." Agreeing that the child should be formed by contact with the world, Livingstone puts the issue which divides so many in educational philosophy: "But it must be the right world . . . it must be the world at its best, a world akin to society as it is, but far higher and better. The knowledge of this . . . must be imparted."

The issues of the what and how of education thus trap us in "the web of ideological disputes" as effectively and disastrously as ever. Our hope is for something better through the kind of teaching of philosophy of education which will reduce the confusion and make our conflicts and controversies intelligent and profitable. We need a better vision about "the Word vs. the Situation" controversy. We need the wholeness and health which can come from philosophy of education courses exemplifying that intellectual activity of teacher and students which leads to "mindfulness".

Hence the course in philosophical and social foundations of education, for example, might well be directed toward those experiences leading to reflection toward better ideas about what teachers could and should be doing in schools today. Hopefully, determination of the teacher's role through a term paper assignment would provide each student with an initial guide to give direction and help him make meaningful choices and judgments. The "better" learning, some of my students have come to see, is not being handed the Word from the teacher but is something the student has to get for himself, out of a structured relationship far superior to that of anarchy in which pupil and teacher are mere equals in ignorance. The pupil, some students come to discover through this project, needs guidance and direction; he does not know. Ideally, the teacher knows more, is a professional expert, and can be a resource for the student to learn something for himself. If the teacher has the wider vision, the student can draw upon him and be put in touch with men, and ideas, and books. These contacts lead to awareness, at first awareness of differing beliefs and opinions, next questioning, and then the intellectual search for knowledge. Out of such searching comes the student's OWN beliefs about HIS role as a teacher, the grounds of which HE has examined in the light of a broader contact and vision. The student's reflective commitment to a thought-through relationship between "the Word" and "the Situation" to his own preferred view may mean his own better teaching.

"I need this," reports one student, "as a basis for teaching methods in the classroom."

A surprising number of students express a heartening and warming testimony to the relevance of such experiences and reflection in philosophy and philosophy of education. Such teaching of philosophy of education does meet, they testify, the need of the new teacher for a personal educational philosophy. "Without a thorough knowledge of philosophy of education including history of education," wrote one student, "the new teacher is open to attack by extremes and lacks the proper equipment to know what things are important and what things need to be emphasized." "Especially," this student wrote, "he needs to have a clear idea of what truth and knowledge are." The teaching of philosophy of education becomes conclusively relevant when students such as Nancy L. Myers share with us this rich experience in a philosophy of education course in the spring of 1971:

Now I see a reason to be a teacher. I would like to help guide less enlightened minds than mine to a greater knowledge, or rather to a place where they can see better where they stand and where they wish to go from there. . . .

Knowledge is a basis to build greater knowledge upon. My role as a teacher is to help build the next stage in a fellow human being's awareness so that maybe he will not have to go through a painful experience or expose others to danger. The teacher keeps knowledge alive and growing. . . .

Documentations

1. This part of the paper is printed here with the special permission of the Journal of Thought, the complete documentation being Hugh C. Black, "The Relevancy of Teaching Philosophy of Education," Journal of Thought -- An Interdisciplinary Journal, 8 (No. 1, January 1973): 65-73.

DISCUSSION

F. A. GUERARD, ET AL

F. A. Guerard: The principal thoughts in Black's introduction and his published paper to which discussion turned appeared to be: Silberman's view that relevance would continue when philosophy of education courses contribute to helping man face his "choices as he confronts the most fundamental questions of value and purposes". Black's views (1) of philosophy as the concern of everybody; as the continuing examination of the basis for beliefs about the nature of knowledge, truth, and goodness; as showing panaceas as varying emphases on aspects within education as a whole; as using known goods to achieve something better as relevant to healing ideological divisions; and (2) that philosophy of education courses need to put students in touch with men, ideas, and books leading to awareness of differing beliefs, search for knowledge, and finally a student's beliefs about his role as a teacher.

Lawrence Thomas: Philosophy of education was more highly regarded in the past. In your introduction you appear to present it as a constant. But now you raise questions about revising it.

Hugh C. Black: The basics may stay the same; the emphasis may change. The subject has always been under attack. Its relevance has been seen more by teachers than by students. But it is the business of everyone; it is not an elitist subject.

Robert Bruce McLaren: If we are relevant, why did no commissioners from Sacramento consult philosophers before passing the Ryan Act?

Hugh C. Black: Philosophers of education need to be more critical of their activities and relate them to our institutions, but not become an activist group.

Leonard Fels: Americans have been schizophrenic: they built an organized civilization not related to the Calvinistic, subjectivistic position -- what Santayana called the transcendentalist "genteel tradition" of intellectuals. Americans have held both positions at once. The academic world is still in the genteel tradition. We haven't developed the kind of philosophy that fits American life. So commissions do not consult philosophers, who seem as a group not interested in taking their philosophy to the problems that human beings face. "Fundamentally, philosophy of education must stem from an ethical position that makes some sense in relation to the major problems that Americans face." We need to connect the problems and the kind of philosophy of education we think should go on, that we think can help solve some of these problems.

Hugh C. Black: Philosophers of education are concerned in the ethical bit -- with the kind of people we are and with our ability to judge matters aright.

Leonard Fels: Agreed, but the philosophy profession is not involved in those discussions. What we should do is use those ethical points that we all agree on to make education relevant to what is going on in life today. Then everybody would listen (depending on the kind of philosopher talking, of course). For instance, an ethics course can be tailored for specific majors, be made so relevant that students find it the most interesting course they have -- which carries out Horace Mann's belief that public schools must give nonsectarian moral education.

Robert Bruce McLaren: Everyone is right in the views given -- no problem but to "unify philosophy and join our positions in ethics to our philosophical position. Teaching courses in ethics in the ways mentioned do make a reasonable connection to our practical life.

Leonard Fels: "Ethics is the fundamental philosophy, because in ethics you are talking about human beings, the nature of man, and how men get along with one another." "Major philosophers are fundamentally talking about ethical problems underneath the rest of the problems." "Truth is important because you get certain ethical results when you tell the truth and you get other kinds of ethical results when you don't."

T. Frank Saunders: It was good to bring up the word ethics so we could get the meaning and all be talking about the same thing.

Hugh C. Black: "It is an oversimplification to talk about relevance in terms of the content of what it is that you are teaching. Teachers are what make the thing relevant." "I think a discussion of relevance has to address itself to the way in which teachers make things relevant." "The way you drew from that book was a way to make things relevant."

Getting back to our basic problem: each of us puts our own emphasis more and more on how we do it rather than on the what. I can't see the emphasis on the how and the process. I still think that it is the content and the what that we have to bring in together, and that's my plea as we go into the future.

T. Frank Saunders: Probably the most important thing we have to offer is perspective, support, restatements of an idea, such that the person who has posed an idea can now see it in a different light. We need

to support someone's position to the point that he can stumble over something in his position. There is no way in which we as philosophers have any clear right to direct or forge the future of others. We have no right to be persons in a philosophic task. As professionals, we may use personalized qualities to convey a certain idea, to persuade someone to go in a given direction, but I hope we don't give people forged futures, preforged values. It disturbs me that we as professionals either get personally involved in the issue, since that is not our professional task, and that we take a given position with all force. I think this is a part of your point, Hugh, and when Bob was making his summary, he was exhibiting, while talking about philosophy of education, exactly what we are talking about. He proceeded to say how well you had all done making your statements. He proceeded to try to integrate each of them and say none of them was wrong, and to give some direction, which is what we should do -- bind our life style to the things we are talking about and to give us some new charge. If we were to back off on our specific charge as philosophers as such, we would find ourselves much more acceptable to a wide variety of people.

Hugh C. Black: I wonder how much, Frank, you would agree with [the ideas from the student in] the article we were to discuss -- "I would like to help guide less enlightened minds. . . to a place where they can see better where they stand and where they wish to go. . . . Knowledge is a basis to build greater knowledge upon. My role as a teacher is to build the next stage in a fellow human being's awareness. . . . The teacher keeps knowledge alive and growing." I wonder if that is not our main business in philosophy of education. Isn't there some knowledge about theories of philosophies of education, and isn't that our responsibility, in terms of perspective?

T. Frank Saunders: I agree that is a major portion of our job. I think that in some process of expressing things my main objection as a technician is that I am forever being told by someone what something is about without ever being told what problem he has with saying it. Someone hides the most difficult things he has behind his own system. And if I were a teacher trying to do something to someone of maximum power, I would say to you -- here are some of the most severe problems I have with whatever I think I know a lot about. . . . Never mind this stuff I know; here are the problems I have, . . . regardless of how useful it is to keep knowledge alive. If you understand my problem, come back quickly, I need help. If all I tell you is how to avoid the pitfalls of our knowledge getting -- I don't know if I should do that. "A man is known by the quandaries he keeps. The job is to give him more quandaries."

Hugh C. Black: Isn't that the main thing in philosophy that Leonard was talking about -- great philosophers are those who raise great questions? There is a great deal of knowledge in both philosophy and philosophy of education and we've got to get them together and do better.

Leonard Fels: There is a great deal of knowledge. I think it is assinine to think we don't know any answers. I think we know a lot of answers and we want the next generation to start where we leave off, not where we started.

Robert Bruce McLaren: I would agree that we know a lot of answers. I think we have not orchestrated them.... We have forgotten that ethics is a derivative. It always arises from some ontological presupposition. We have to re-examine that.

Leonard Fels: I can't agree with you less, Bob.

Hugh C. Black: Now we're getting into dialectical ideas.

Gerald McDonald: I want to take another look at the relation between thought and action. The people having the most influence in education are people like Hoit, Glasser, Silberman, Neill -- the books that students read (unfortunately they bypass Aquinas, Dewey and Maritain). They say these people are talking about what is going on in education. Maybe these people are striking the balance between thought and action. As a philosopher of education, I realize the need to get closer to action. The real action is to introduce those kids to something other than what they are reading hot off the press. The action comes when you guide them to what you've learned from men of thought, and ideas, and practice, and action -- so they don't get a one-sided view. They get it together and have a better perspective, as Frank would say. . . . Students don't think much about education until I force them . . . to make a choice about what they really want to do as teachers, and ask them to defend their choice.

Hugh C. Black: How about this as a possibility? (I don't have any magic answer.) It seems to me one way to lead this is to catch kids where they are and have them in our classes talk about themselves, their views, feelings, and values, and lead them to reflect on "why do you think so-and-so believes this and doesn't believe that? Out of that, they come to see that getting into knowledge is relevant to them (it can be, it has to be), and get them caught up in this stuff that does come back to where they are and their competencies -- having to look at life. . . . Our business is showing the wider view. Students don't have much philosophy of education -- they think about it when they are forced to make a choice about what they want to do as teachers.

Gerald McDonald: And that is part of the process of critical thinking.

SECTION II

A FUTUROLOGICAL ANALYSIS OF EXOSOMATICISM:
BASIC RELATIONSHIPS BETWEEN FUTUROLOGY, PHILOSOPHY, AND EDUCATION

JAMES JOHN JELINEK

Not all educators are philosophers, but all educators, no matter what their level of sophistication in philosophy, deal in one way or another with the enduring issues with which systematic philosophy deals -- absolutism and/or relativism, matter and/or vacuum, time and/or eternity, good and/or evil, unity and/or variety, one and/or many, mechanism and/or vitalism, determinism and/or freedom, mindlessness and/or meaningfulness.

The decisions educators make in their resolution of these enduring issues, the emotions they harbor, and the passions that sway them are of much less significance at any given moment than the assumptions upon which those decisions, actions, and passions are founded, for assumptions, left unexamined and unchanged, not only have consequences as of the moment, but consequences that extend as far into the future as the assumptions upon which they are built all thrive and endure.

The enduring issues and the role of assumptions in the resolution of those issues have a special significance in the valuational analyses of cultural phenomena, especially of modern technology, by present-day educators. They lay bare certain basic relationships between futurology, philosophy, and education.

Neexosomaticism

On the one hand, for example, there are the assumptions inherent in neexosomaticism (neergomonicism). Basic among these assumptions is the belief that advances in the technologizing of a culture more and more deprive the individual of choice. Marcuse (16), Ellul (7), Whyte (31), Kafka (12), Toynbee (29), and Orwell (21) expostulate this assumption with force and clarity. Maximum individual choice, according to neexosomaticism, is the democratic ideal. Technological advances make of people mindless consumer creatures, surrounded by standardized goods, and educated in standardized schools. Being fed a diet of standardized mass culture the people are compelled to adopt standardized life styles.

More specifically, the assumption is that technological advances cause bureaucratization, alienation, helplessness, and dehumanization among men:

Marx, for example, states the artifacts produced by man become an independent power ruling over him "as something alien, as a power independent of the producer". Furthermore, he says, "The worker puts his

life into the object; but then his life no longer belongs to him but to the object." (17)

"The industrial society," states Etzioni, "is the archetype of an alienating society . . . and in effect led to a society that stood between its members and the service of their basic needs." He states, "The post-modern society inherited from its predecessor an alienating structure: the product of modernity -- industrialization, bureaucratization, and the like." (8)

Roszak likewise identifies the prime force of alienation to be technocracy. "The great secret of technocracy," he says, "lies in its capacity to convince us . . . that the vital needs of man are (contrary to everything the great souls of history have told us) purely technical in character." (24)

Man, according to Ellul, was far freer in the past when "choice was a real possibility for him". Today the human being is no longer in any sense the agent of choice. In the future "man will apparently be confined to the role of a recording device". He will be acted upon, but he will not be active. He will be robbed of choice. (7)

"Whatever the gains of our technological age," says Keniston, " . . . many Americans are left with an inarticulate sense of loss, of unrelatedness and lack of connection." (13) With this Fromm agrees. Industrialization, he says, must give way to humanization. (9)

Exosomaticism

On the other hand there are the assumptions inherent in exosomaticism (ergonomicism). Basic among these assumptions is the belief that transience, novelty, and diversity become increasingly greater for individuals in a society as the culture of that society becomes increasingly more technological. The writings of Malinowski (15), Boas (3), Lederer (14), Ogburn (20), Medawar (18), Chase (4), and Toffler (27) provide vigorous and powerful elaborations of this assumption. The consequence of advanced technology, according to exosomaticism, is not a deprivation of individual choice but rather a plenitude, a complexity, a surfeit of individual overchoice. The consequence is a matter of ergonomics -- the extension of certain relationships between human beings and machines, especially in terms of their physiological, psychological, and technological components.

Medawar, for example, states that, "What is human about Man is his technology. . . . The assimilation of technological to ordinary organic evolution (has) substance because all instruments are functionally parts of ourselves. Some instruments like spectrophotometers, microscopes and radio telescopes are sensory accessories inasmuch as they enormously increase sensibility and the range and quality of the sensory input. Other instruments like cutlery, hammers, guns and automobiles are accessories of our effector organs; they are not sensory but motor accessories. A property that all these instruments have in common is that they make no functional sense except as external organs of our own. All sensory instruments report back at some stage or by some route through our ordinary senses. All motor instruments receive their instructions from ourselves. . . . We are integrated psychologically with the instruments that serve us." (18)

Likewise Malinowski points out, "Man in order to live continually alters his surroundings. On all points of contact with the outer world he creates an artificial, secondary environment. . . . Were man to rely on his anatomical equipment exclusively, he would soon be destroyed or perish from hunger and exposure. . . . The man of nature, the *Naturmensch*, does not exist." (15)

The contrasting views of the exosomaticists (ergonomicists) and the neexosomaticists (neergonomicists) are clear indeed. While, for example, Ellul states, "Enclosed within his artificial creation man finds that there is no exit, that he cannot pierce the shell of technology to find again the ancient milieu to which he was adapted for hundreds of thousands of years," (7) Chase is saying, "This would seem to indicate that we did better in the Stone Age. . . . The philosophy of retreat to a simpler era may have had some validity two hundred years ago when Rousseau was celebrating the virtues of Cro-Magnon man, but too much water has gone through the turbines. The growth curves of science and technology have profoundly changed (our) cultural habits . . ." (4)

If, as we stated at the outset, the decisions educators make in their resolution of enduring socio-philosophical issues in general and enduring socio-technological issues in particular continue to be based upon the assumptions of exosomaticism (ergonomicism) or neexosomaticism (neergonomicism), what in the Wellsian sense of futurology can we now establish as hypotheses in the teaching of creative philosophical thinking that are likely to become principles of education in the future?

"Futurology is so new that to many persons it still seems clumsy," says Williamson, "but the probing of possible futures has lately

become a full-time profession. There is a World Future Society open even to amateurs, and an Institute of the Future, which produces forecasts under contract. A staff of futurologists is now as essential to any large military or governmental or commercial establishment as a coterie of soothsayers used to be to a barbarian emperor. Those older forecasters tried hard enough, often with their lives at stake; however, their methods were based on theology or magic or sheer opportunism. But it was Wells, to quote his own Experiment in Autobiography, who made the first attempt to forecast the human future as a whole and to estimate the relative power of this and that great system of influence." (32)

It is in this sense of Wellsian futurology that the following hypotheses are presented. In this context the hypotheses constitute an attempt to anticipate the independent variables and the dependent variables in the exosomaticism (ergonomicism) and neexosomaticism (neergonomicism) inherent in man's relationship to his artifacts and to his fellows. The parallels hypotheses extrapolated from the basic assumptions of exosomaticism and neexosomaticism are as follows:

Freedom

If, as far as they can, men opt for neexosomaticism, if they arrange things to forget the paradoxes of philosophy and the problems of human existence (determinism and freedom, mechanism and vitalism, the one and the many, unity and variety, good and evil, time and eternity, the plenum and the void, moral absolutism and moral relativism, monotheism, polytheism, and atheism), if they strike an average in the countless dimensions of these areas so that they might live as long as possible, so that life on the whole might increase, then, from the point of view of the individual there is a sacrifice of self and of freedom that forces him to the common mold; if, however the individual opts for exosomaticism, if he reverses or slows down the averaging process, if he alters his experience of the passage of time, if he dissolves the many definitions, boundaries, and meanings of artifacts and men, if he perceives greater intensities and more extreme values of experience to occur in many dimensions, then he develops a unique self and boundless freedom.

If a person espouses exosomaticism, if he rejects the notion that each artifact in his environment has an independent reality, if he dissolves that which separates what he is from what he thinks he should be, then there is personified meaning -- the word made referent, alive and

changing, taking its chances, open to beauty and decay; if, on the other hand, he espouses neexosomaticism, if he internalizes the impact of artifacts in his environment (in the sense of things being in the saddle and riding mankind), then he is not free to act according to his deepest inclinations and he develops stultified meanings -- the ancient, rigid laws and lawgivers, fixed, abstract, decided.

If there is exosomaticism at work, if there is a range of possible adaptive responses available to an individual in all situations in which he finds himself, then he has a feeling of freedom to act and to choose, a feeling that occurs in the presence of a broadened consciousness both of impulses and ethics; if, however, there is neexosomaticism at work, if the individual internalizes the force of artifacts in his environment, then he has no feeling of responsibility for consequences, he avoids judging for himself what is right and what is wrong, he is not weighed down by the fearful burden of free choice, and he is not free.

Self

If the individual's perception of himself as he relates to the culture in which he lives is exosomatic, if he perceives himself to be emotional, original, demanding, excitable, forgetful, fair-minded, idealistic, logical, mischievous, moody, rational, reckless, tactless, then he is inner directed and self actualizing and exercises independence of judgment; if, however, the individual's perception of himself as he relates to the culture in which he lives is neexosomatic, if he perceives himself to be efficient, kind, obliging, optimistic, patient, affected, appreciative, considerate, dignified, enthusiastic, friendly, helpful, humorous, mannerly, modest, stable, tactful, wise, then he is outer directed and not self actualizing and yields to the judgments of others.

If the individual's perception of himself as he relates to the artifacts of his culture is exosomatic, if he feels he is characterized by (a) a certain positive valuation of intellect and cognitive originality, as well as a spirit of open-mindedness (logical, rational, original, idealistic, fair-minded), (b) a high degree of personal involvement and emotional reactivity, (emotional, excitable, moody), and (c) a lack of social ease, or an absence of commonly valued social virtues (tactless, reckless, forgetful, mischievous), then he is inner directed and self actualizing and he exercises independence of judgment; if, however, the individual's perception of himself as he relates to the artifacts of his

culture is neexosomatic, if he feels he is characterized by (a) ease and helpfulness in interpersonal relations (kind, obliging, appreciative, considerate, enthusiastic, friendly, helpful, tactful), (b) personal effectiveness and planfulness in achieving some goal (determined, efficient, patient, wise), and (c) personal stability and healthy-mindedness (stable, optimistic, humorous, modest, dignified), then he is outer directed and not self actualizing and yields to the judgments of others.

If the individual perceives himself as being exosomatic as he relates to the artifacts of his culture, if he perceives himself as being gloomy, loud, unstable, bitter, cool, dissatisfied, pessimistic, emotional, irritable, pleasure-seeking, aloof, sarcastic, spendthrift, distractible, demanding, indifferent, anxious, opinionated, temperamental, and quick, then in his preferences for artifacts he has a propensity for what is complex, irregular, and whimsical, and he has a propensity for what is radically experimental, sensational, sensual, esoteric, primitive, and naive; if, however, the individual perceives himself as being contented, gentle, conservative, patient, peaceable, serious, individualistic, stable, worrying, timid, thrifty, dreamy, deliberate, moderate, modest, responsible, foresighted, and conscientious, then in his preferences for artifacts he has a propensity for what is simple, regularly predictable, and following some cardinal principle that can be educed at a glance, and he has a propensity for themes involving religion, authority, aristocracy, and tradition.

If the individual as he relates to the artifacts of his culture is exosomatic, if he is an artist in the creative sense, if he turns intently toward his potential for creation, if he feels that to be creative is to be more fully human and more fully oneself, then he approves artifacts depicting the modern, the radically experimental, the primitive and the sensual, while disliking what is religious, aristocratic, traditional, and emotionally controlled; if, however, the individual as he relates to the artifacts of his culture is neexosomatic, if he is like people in general, if he is not an artist in the creative sense, if he does not turn intently toward his potential for creation, if he does not feel that to be creative is to be more fully human and more fully oneself, then he approves artifacts depicting good breeding, religion, and authority and rejects those depicting the daring, the esoteric, the abstract, the "unnatural," and the frankly sensual.

Morality

If a person is exosomatic, if his awareness includes the broadest possible aspects of the artifacts in his culture and the deepest possible comprehension of them, while at the same time, he is most simple and direct in his feelings, thoughts, and actions concerning those artifacts, then he rebels, he resists acculturation, he refuses to adjust, he is adamant in his insistence on the importance of self and individuality and actions, he is usually virtuous in the simple moral sense of the term, he does what he thinks is right and what he thinks is right is that people should not lie to one another or to themselves, that they should not steal, slander, persecute, intrude, do damage willfully, go back on their word, fail a friend, or do any of the things that put them on the side of death as against life, and he lives and functions in such a way that he knows who he is and you know who he is and he knows who you are when his thoughts and actions are in accord with his moral judgment; if, however, the person is neexosomatic with respect to these matters, then he does what he thinks is wrong, he gets a feeling of being dead, and when he is steeped in such wrongful ways he gets the feeling of being dead all the time, and other people know he is dead, dead in spirit.

Soundness

If the awareness of a person is exosomatic, if it includes the broadest possible aspects of human experience as it relates to cultural artifacts and the deepest possible comprehension of them, while at the same time the person is most simple and direct in his feelings, thoughts and actions then the person is adaptable, organized, persistent, resourceful, appreciative, friendly, natural, stable, unaffected, alert, ambitious, calm, capable, confident, civilized, dependable, efficient, foresighted, helpful, intelligent, moderate, realistic, responsible, serious, considerate, fair-minded, good natured, honest, pleasant, reasonable, sincere, sociable, tactful, tolerant, trusting, unassuming; if, however, the awareness of the person is neexosomatic, if it does not include the broadest possible aspects of human experience as it relates to cultural artifacts and the deepest possible comprehension of them, while at the same time the person is most simple and direct in his feelings, thoughts, and actions, then the person is immature, unstable, anxious, awkward, gynandromorphic, emotional, fearful, high-strung, moody, self-centered, dull, inhibited, narrow, peculiar, queer, self-punishing,

confused, dissatisfied, distrustful, defensive, egotistical, preoccupied, tense, undependable, withdrawn.

Originality

If an individual is verbally fluent and conversationally facile, if he has a high degree of intellect, if he communicates ideas clearly and effectively, if he highly cathects intellectual activity, if he is an effective leader, if he is persuasive and wins others over to his point of view, if he is concerned with philosophical problems and the meaning of life, and if he takes an ascendant role, in his relations with others, then he is exosomatic and original, his responses to problematical situations in the culture being uncommon to the particular group of which he is a part but adaptive to the reality of his environment; if, however, an individual is conforming and tends to do the things that are prescribed, if he is stereotyped and unoriginal in his approach to problems, if he has a narrow range of interests, if he tends not to become involved in things, if he lacks social poise and presence, if he is unaware of his own social stimulus value, if he has a slow personal tempo, if with respect to authority he is submissive, compliant, and overly accepting, if he lacks confidence in self, if he is rigid and inflexible, if he lacks insight into his own motives, if he is suggestible, and if he is unable to make decisions without vacillation, hesitation, and delay, then he is neexosomatic and lacks originality, his responses to problematical situations in the culture being common to the particular group of which he is a part and not adaptive to the reality of his environment.

If a person prefers complexity and some degree of imbalance in phenomena, if he is complex psychodynamically and has great personal scope, if he is independent in his judgment, if he is self-assertive and dominant, if he rejects suppression as a mechanism for the control of impulse, if he forbids himself no thoughts, if he dislikes to police himself and others, and if he is disposed to entertain impulses and ideas that are commonly taboo, then he is exosomatic and original, his responses to problematical situations in the culture being uncommon to the particular group of which he is a part but adaptive to the reality of his environment, if, however, there is organization with maladaptive simplicity, with suppression to achieve unity, with suppression of impulses and emotions to maintain semblance of stability with suppression because in the short run it seems to achieve unity, with suppression that inhibits development of the greater level of complexity, and thus avoids the temporary

disintegration that otherwise results, then the person is neexosomaticistic and not original, his responses to problematical situations in the culture being common to the particular group of which he is a part but not adaptive to the reality of his environment.

Personality

If an individual is characterized as exosomatic, if he is complex in his relationships with the artifacts of his culture, then (a) he is more intensely expressive, expansive, and fluent in speech than the person characterized by simplicity, (b) he is "unadjusted" -- he does not fit in very well in the world as it is, yet he frequently perceives that world more accurately than does his better-adjusted fellow, (c) he does not have "abundance values" -- a sense of security and optimism regarding the future, absence of fears of deprivation, of being exploited, and of being cheated, (d) he appears "deceitful" -- identified with duplicity, ironicism, sardonicism, guile, subterfuge, "two-facedness," lack of frankness, lack of trust, (e) he finds it difficult to be wholly himself at all times, (f) he is characterized by originality, artistic creativeness and expression, and excellence of esthetic judgment, he has great flexibility in his thought processes, (g) his psychic life style makes for a wide consciousness of impulse, (h) he has tolerance for great subjectively experienced anxiety, (i) he is socially nonconformistic, holding socially dissident and deviant opinions, (j) he is characterized by artistic interests, unconventionality, political radicalism, high valuation of creativity even at the expense of "normality," and a liking for change, (k) his perceptual decisions in the complex of phenomena that makes up the world is to attend to the unstable rather than the stable, the unpredictable rather than the predictable, and the chaotic rather than the order -- to the eccentric, the relative, and the arbitrary aspect of the world (the griefness of the individual life, the blind uncaringness of matter, the sometime hypocrisy of authority, accidents of circumstance, the presence of evil, tragic fate, the impossibility of freedom for the only organism capable of conceiving freedom, and so on); if, however, an individual is characterized as neexosomatic, if he is simple in his relationships with the artifacts of his culture, then (a) he is more natural and likeable, and also more straightforward and lacking in duplicity, (b) he is "adjusted" -- he gets along in the world as it is, he has social conformity, he adapts to a wide range of conditions, he fits in, (c) he finds it easy to be always himself, (d) he is "rigid" -- inflexible of thought and manner, stubborn, pedantic, unbending, firm, (e) he has a

psychic life style that narrows consciousness of impulse -- a tendency to repress aggressive and erotic impulses, or to render them innocuous by rationalization, reinterpretation, or gratification in a substitutive manner which does not cause conflict, (f) he has no tolerance for subjectively experienced anxiety, (g) he is conformistic, showing deference, willingness to be led, compliance, and overready acceptance of authority, (h) he is characterized by social conformity, respect for custom and ceremony, friendliness toward tradition, categorical moral judgment, undeviating patriotism, and suppression of troublesome new forces -- impulses and inventions, (i) his orientation is toward repression as a psychic mechanism, (j) he is at best associated with personal stability and balance, while at worst with categorical rejection of all that threatens disorder and disequilibrium, (k) he produces in a pathological context stereotyped thinking, rigid and compulsive morality, and hatred of instinctual aggressive and erotic forces which might upset a precariously maintained balance, (l) his perceptual decisions in the complex of phenomena that makes up the world is to attend to its ordered aspect, to regular sequences of events, to a stable center of the universe (the sun, the church, the state, the home, the parent, God, eternity, and so on).

If the individual opts for exosomaticism, for complexity in his relationships with the artifacts of his culture, then (a) at best he makes for originality and creativeness, a greater tolerance for unusual ideas and formulations; the sometimes disordered and unstable world has its counterpart in the person's inner discord, but the crucial ameliorative factor is a constant effort to integrate the inner and outer complexity in a higher-order synthesis; the goal is to attain the psychological analogue of mathematical elegance, to allow into the perceptual system the greatest possible richness of experience, while yet finding in this complexity some overall pattern; he is not immobilized by anxiety in the face of great uncertainty, but is at once perturbed and challenged; for him optimism is impossible, but pessimism is lifted from the personal to the tragic level, resulting not in apathy but in living abundantly, (b) at worst such a perceptual attitude leads to grossly disorganized behavior, to a surrender to chaos; it results in nihilism, despair, and disintegration; the personal life itself becomes simply an acting out of the meaninglessness of the universe, a bitter joke directed against its own maker; the individual is overwhelmed by the apparent insolubility of the problem and finds the disorder of life disgusting and hateful; his essential world-view is thus depreciative and hostile; if, however, the individual opts for neexosomaticism, for order in his relationships with the artifacts of his culture, then (a) at best he makes for personal stability and balance, a sort of easy going optimism combined with religious faith, a friendliness toward tradition, custom, and ceremony, and respect for authority without

subservience to it, and (b) at worst he makes for categorical rejection of all that threatens disorder, a fear of anything that might bring disequilibrium; optimism becomes a matter of policy; religion becomes a prescription and a ritual; his decisions are associated with stereotyped thinking, rigid and compulsive morality, and hatred of instinctual aggressive and erotic forces which might upset the precariously maintained balance; equilibrium, depends essentially upon exclusion, a kind of perceptual distortion which consists in refusing to see parts of reality that cannot be assimilated to some preconceived system.

This, then, is a futurological extrapolation of independent variables and dependent variables inherent in the basic assumptions of exosomaticism and neexosomaticism. As such, the extrapolation attempts to anticipate certain basic relationships between futurology, philosophy, and education.

Documentations

1. Anderson, Harold H., Editor, Creativity, Harper and Row, New York, 1959.
2. Barron, Frank, Creativity and Personal Freedom, Van Nostrand Company, Inc., Princeton, New Jersey, 1968.
3. Boas, Franz, Anthropology and Modern Life, W.W. Norton, New York, 1962; - - - - - , Race, Language, and Culture, Free Press, New York, 1965.
4. Chase, Stuart, "Two Cheers for Technology," Saturday Review, February 20, 1971, pp. 20-21, 76-77.
5. Cropley, A.J., Creativity, Longmans, Green, and Company, Ltd., London, 1967.
6. Ehrlich, Paul R., and Holdren, John P., "Technology for the Poor: We Cannot Abandon Technology, But It Must Be Focused on Human Needs with a Minimum of Adverse Side Effects," Saturday Review, July 3, 1971, pp. 46-47.
7. Ellul, Jacques, The Technological Society, Vintage Books, New York, 1967.

8. Etzioni, Amita, The Active Society, Free Press, New York, 1968.

9. Fromm, Erich, The Sane Society, Rinehart and Company, New York, 1955.

10. Gordon, William J. J., Synergetics: The Development of Creative Capacity, Collier-Macmillan, Ltd., London, 1968.

11. Jelinek, James John, "Competency-Based Education: Consensus Cognoscenti Versus Reconstructio Experientiae," pp. 1-11, Philosophy of Education: 1972-1973, edited by James John Jelinek, Far Western Philosophy of Education Society, Tempe, Arizona, 1973; - - - - - , "A Reconstructed Epistemology of Education," pp. 17-24, Philosophy of Education: 1969, edited by James John Jelinek, Far Western Philosophy of Education Society, Tempe, Arizona, 1969; - - - - - , "The Identification and Modification of Philosophies of Education Held by Graduate Students in Teacher Education Programs," pp. 1-17, Proceedings of the Annual Meeting of the Far Western Philosophy of Education Society, 1967, edited by John Schulte, Far Western Philosophy of Education Society, Santa Barbara, California, 1967; - - - - - , "The Governance of Colleges in a Democracy," pp. 147-172, Philosophy of Education: 1970-1972, edited by James John Jelinek, Far Western Philosophy of Education Society, Tempe, Arizona, 1972; - - - - - , "The Influence of the Teaching of Certain Elementary Principles of Philosophy Upon Modifications of Basic Aspects of the Concept of Self Held by College Students," pp. 25-38, Philosophy of Education: 1968, edited by James John Jelinek, Far Western Philosophy of Education Society, Tempe, Arizona, 1968.

12. Kafka, Franz, Diaries of Franz Kafka, Volumes I, II, Schocken Books, Inc., New York, 1948.

13. Keniston, Kenneth, "Youth: A 'New' Stage of Life," The American Scholar, Autumn, 1970.

14. Lederer, Emil, "Technology," pp. 553-559, Volume XIV, Encyclopedia of Social Sciences, edited by Edwin R. A. Seligman and Alvin Johnson, Macmillan, New York, 1937.

15. Malinowski, Bronislaw, Freedom and Civilization, Indiana University Press, Bloomington, 1960; - - - - - , Scientific Theory of Culture, University of North Carolina Press, Chapel Hill, 1944; - - - - - , "Magic, Science, and Religion," pp. 19-84, Science, Religion, and Reality, edited by Joseph Needham, London, 1925.

16. Marcuse, Herbert, Eros and Civilization, Beacon Press, Inc., Boston, 1955; - - - - - , Essay on Liberation, Beacon Press, Inc., Boston, 1969; - - - - - , One Dimensional Man, Beacon Press, Inc., Boston, 1964; - - - - - , Negations: Essays in Critical Theory, Beacon Press, Inc., Boston, 1969; - - - - - , Reason and Revolution, Beacon Press, Inc., Boston, 1963.

17. Marx, Karl, Economic and Philosophical Manuscripts of 1844, edited by Dirk J. Struik and translated by Martin Milligan, International Publishing Company, New York, 1963; - - - - - , Early Writings, McGraw-Hill and Company, New York, 1963.

18. Medawar, Sir Peter, "What's Human about Man Is His Technology," Smithsonian, Volume 2, Number 2, May, 1973, pp. 22-28.

19. Metha, Arlene, "Existential Frustration and Psychological Anomie Within Select College Student Subcultures," pp. 171-213, Philosophy of Education: 1972-1973, edited by James John Jelinek, Far Western Philosophy of Education Society, Tempe, Arizona, 1973.

20. Ogburn, W. F., Social Change, Macmillan, New York, 1922.

21. Orwell, Sonia and Angus, The Collected Essays, Journalism, and Letters of George Orwell, Volumes I-IV, Harcourt, Brace, Jovanovich, New York, 1968.

22. Osborn, Alex F., Applied Imagination: Principles and Procedures of Creative Problem-Solving, Charles Scribner's Sons, New York, 1957.

23. Prince, George M., The Practice of Creativity, Collier Books, New York, 1970.

24. Roszak, Theodore, The Making of a Counter Culture, Doubleday and Company, New York, 1969.

25. Skinner, B. F., Beyond Freedom and Dignity, Alfred A. Knopf, New York, 1971.

26. Taylor, Calvin W., Creativity: Progress and Potential, McGraw-Hill Book Company, New York, 1964.

27. Toffler, Alvin, Future Shock, Bantam Books, New York, 1970.

28. Torrance, E. Paul and J. Pansy, Is Creativity Teachable? Phi Delta Kappa Educational Foundation, Bloomington, Indiana, 1973.

29. Toynbee, Arnold, "Why I Dislike Western Civilization," The New York Times Magazine, May 10, 1964.

30. Whiting, Charles S., Creative Thinking, Reinhold Publishing Corporation, New York, 1958.

31. Whyte, William H., The Organization Man, Simon and Schuster, New York, 1956.

32. Williamson, Jack, "H. G. Wells: The Man Who Discovered Tomorrow," Saturday Review, January 1, 1972, pp. 12-15.

SECTION III

THE FUTURE OF EDUCATIONAL PHILOSOPHY AND THE RISE OF SOCIAL SCIENCE

JAMES ROMIG

The 1972 meeting of the Far Western Philosophy of Education Society disturbed me. By far the most significant part of my disorder was the productive cognitive disequilibrium which required not only assimilation of the many important ideas offered but creative accommodation and mental reorganization of my social scientist's mind. I was positively forced to broaden my thinking, to -- in a word -- philosophize. But another disturbance, while personally productive, appears to me to be potentially harmful to the future of educational philosophy. I am disturbed that some first-rate philosophers seem ready to become second-rate psychologists. And as a second-rate psychologist myself, I say the world needs more first-rate philosophers!

George Kneller has defined philosophy as "the attempt to think in the most general and systematic way about everything in the universe -- about the 'whole of reality'". He asks the philosopher to "seek some pattern that will enable us to understand the sum of things of which we, as individuals, are only a part". (1) Will Durant has compared philosophy and science:

Science seems always to advance, while philosophy seems always to lose ground. Yet this is only because philosophy accepts the hard and hazardous task of dealing with problems not yet open to the methods of science -- problems like good and evil, beauty and ugliness, order and freedom, life and death; so soon as a field of inquiry yields knowledge susceptible of exact formulation it is called science. Every science begins as philosophy and ends as art. (2)

Both Kneller and Durant, at least in the above statements, are first-rate philosophers.

The behavior of philosophers which I have termed willingness to become second-rate psychologists is their eagerness to become more empirical, to manipulate "real data," and to deal behavioristically with the very concrete problems of education. Some seem to lack a belief in the viable future of traditional philosophic speculation. I will not point to individual papers or remarks to support my philosophers-are-becoming-psychologists assertion but will only report my general observation and a personal experience. During a discussion and in a prepared response (3) a young interloper suggested to the 1972 meeting that philosophers should protect and use their traditional "ivory tower". Not one supporting voice cried out in the wilderness of disagreement. Everyone present argued for involvement -- or chose to remain silent (and uninvolved).

Let me quickly assert that I am not running off at the typewriter in ruffled response to not being agreed with last year. Indeed, if my observations are correct, most F.W.P.E.S. members pay all too much attention to the educational psychologists. The names Piaget, Skinner, and Bruner were heard far more often than . . . Who are the international luminaries of contemporary educational philosophy?

The fundamental thesis of this paper is that contemporary (and future) educational philosophers should not emulate the social scientists, but should use their data and conclusions -- not their methods -- to organize new truths and to place those truths into proper perspective. Educational philosophers of this world, philosophize!

Northrup Frye has said that B. F. Skinner's "Philistine vulgarity makes a caricature of the pedantry of social science". He says that social scientists "see society merely as an extension of their own specialty". (4) If he is right, and if Kneller and Durant are correct, then it is up to the philosophers to place modern social science, with its extreme emphasis on empirical behaviorism, into its proper matrix and to begin to solve the larger problems of education.

The out-of-fashion ivory tower is not, to my mind, a place of retreat from reality. It is not built as a stone-walled block to the perception of real problems and real answers. My ideal ivory tower has a window, and a library, mail service, a telephone -- even a calculator, a computer, and a television set -- and a philosopher, a lover of all knowledge. My philosopher knows his data, his vulgarity, his social science, and his philosophical methods. He uses the quiet perspective of his modernized tower not to avoid science but to understand it -- its values and its limitations -- to evaluate it, to criticize it, and to improve it. He yells "foul" at science's faults, "take care" at its mistakes, and "well done" at its accomplishments. Most importantly, most philosophically, the philosopher places science in its matrix and reads the whole. He shows how and when and why and if scientific "advances" can best be used.

Science assumes a particular metaphysics. It uses a particular epistemology. It has little axiology. It is Philistine as well as learned. It is a cliché to point out that science offers capabilities before man knows what to do with the power. It should be better understood that some of the "facts" of educational science are not immediately testable beyond controlled or theoretical conditions, and that others are built upon unproved assumptions. Much psychological research turns up conflicting results. Pick a teaching technique. I will show you a study

proving it superior to another, a study finding it inferior, and a third study finding it equally effective. (5) It is up to the educational philosopher to tell us what has gone wrong.

It is not that philosophers should become more scientific (though they might profitably invest more time considering science) but that scientists should become more philosophic (and they should spend more time listening to philosophers). If the educational philosopher is to philosophize and to consider science from his modern ivory tower, and if he is to do so without becoming merely a second-rate scientist, how is he to proceed? What is the future of educational philosophy?

The 1972 F.W.P.E.S. meeting provided some excellent examples of first-rate philosophers considering science -- as philosophers. T. F. Saunders and Colleen Decker considered measurement and problem solving. James Jelinek considered behavioral objectives and competency-based education. Robert Brackenbury offered a general charge to bring "our own philosophy to bear upon crucial issues of our times" and went on to evaluate performance-based programs and behavioristic conditioning. Bernice Goldmark suggested that philosophers urge teachers and students to consider epistemological problems. John Connely explored the use and process of memory. William O'Neill analyzed the varying sorts of behaviorism. (6)

But what is the future of educational philosophy? What practices will allow philosophy -- as philosophy -- to deal effectively with the rise of modern science? My answers are unashamedly simple and unembarrassingly well known. The role of philosophy is discussed in every introductory text and can be explained at length by every philosopher, but the role of philosophy is not usually defined in terms of contemporary social science. Educational philosophy needs to restate its mission in the vocabulary of science; it need not reshape its mission in the form of science.

When an educational philosopher considers modern social science, he has five sorts of problems:

1. describing social science;
2. analyzing its parts and processes;
3. suggesting ways to improve science;
4. suggesting ways to use the findings of science;
5. suggesting other ways of finding truth.

Describing Social Science. Any social science seems to have five

basic parts: assumptions, methods, data, conclusions, applications.

Analyzing Its Parts and Processes. The assumptions of science seem to be of two sorts: metaphysical and epistemological. Its methods are intimately tied to its assumptions and to its language and models. As many have pointed out, the words used to state a problem, the metaphors and conceptual models of thought, the data-gathering instruments, the cognitive structures of the scientists, etc., often determine method. And method often determines finding. The data themselves are products of assumption and method. Their validity and reliability depend upon the methodological skill of the data gatherer. The conclusions of science are very much a matter of process and method. Whether inductive or deductive, the results of an investigation are dependent on assumptions, procedures, and data. The logical processes of induction and deduction are rightfully part of the realm of traditional philosophy. And the applications of science are clearly matters of axiology. The traditional value concerns of general philosophy need to be brought to the consideration of "objectives of education". Educational psychology can point out that it is difficult to teach until one has decided what to teach, but it cannot give us much help in that decision. Philosophy must show us what to teach; psychology and the other social sciences -- together with educational philosophy -- can help us see how to teach. And philosophy can help to remind the world that other means to the truth are available. Some questions are not formulated in such a way that they are answerable by scientific inquiry. Education need not forget all the wisdom of the ages, the teachings of literature, the folkways, the religious truths. The contemporary educational philosopher must remind the pedagogical world to look beyond the scientific information given. Even the operations of science depend on more than careful empiricism in the formulation of hypotheses and "hunches".

Figure One may help to show the parts and processes of social science and may serve as a simplified conceptual guide for the asking of philosophic questions about the nature of educational science. (7)

What then is the future of educational philosophy? Educational philosophers must use the traditional methods of speculation and reason to speak, from an "ivory tower" perspective, of the nature, problems, and improvements of social science and education, of society and the plight of man. The philosopher must not get so close to his data and the specific problems of education that he becomes as myopic as the social scientist who has not studied philosophy.

But let me finish by saying that I have overstated my case.

Figure 1.

The Parts and Processes of Social Science

Assumptions

metaphysical
epistemological

Methods

problem choice
problem statement
metaphors and models
instrumentation
cognitive structure of scientist
logic, experimental design and control

Data

validity
reliability

Conclusions

inductions
deductions
 based upon inductions
 based upon assumptions (premises)

Applications

traditional value concerns of general philosophy
educational objectives
social goals

Philosophers should certainly use many methods and perspectives and findings, even scientific ones, to continue their total search for complete truth. Perhaps the most important point here is to be made to the "second-rate" psychologists like myself: Science without philosophy is dangerous!

The future of philosophy is secure. It lies in remembering the traditional role of the philosopher. It lies in restating the role of philosophy in modern terms, in pursuing traditional philosophy within contemporary contexts. The rise of social science brings not the demise of philosophy but more matter for its consideration and therefor more food for its table. The philosopher must ingest and digest social science, and he must turn its ample fodder into fuel for educational growth and development.

Documentations

1. George F. Kneller, Introduction to the Philosophy of Education, John Wiley and Sons, Inc., New York, 1964, p. 1.
2. Will Durant, The Story of Philosophy, Simon and Schuster, New York, 1963, p. 2.
3. James Romig, "Response to James L. Catanzaro," in Philosophy of Education 1972-1973: Proceedings of F.W.P.E.S., James J. Jelinek, ed., Bureau of Educational Research and Services, Arizona State University, Tempe, 1973, pp. 167-170.
4. Northrup Frye, "Varieties of Literary Utopias," in Utopias and Utopian Thought, Frank E. Manuel, ed., Houghton, Mifflin Company, Boston, 1966, pp. 25-49.
5. See N. L. Gage, "Teaching Methods," in Encyclopedia of Educational Research, fourth edition, Robert L. Ebel, ed., The Macmillan Company, London, 1969, pp. 1446-1458.
6. See James J. Jelinek, ed., op. cit.
7. The author is indebted to a more complete analysis of science and "symbolic instruments" in Design for Thinking, Albert Upton, Stanford University Press, Stanford, 1961.

SECTION IV
THE ILLUSION OF THE FUTURE

WILLIAM H. MCGOWAN

When considering official institutional policy alone, I am forced to a grim conclusion about American public education. It has no Future. Not at the moment. It is not directed toward the realization of any humane value. Without an inherent aim no enterprise can have a Future. But surely the American educational enterprise has an aim -- indeed, a whole swarm of aims. In an effort to attain fiscal "accountability" teachers are being pressured to state behaviorally defined program "objectives". These objectives are specified in terms of behavioral "outcomes" so that authorities can readily test pupils to determine if the objectives have been met. And are not these objectives the aims of education?

My answer to that is no, that the aim or point or object of an education is not identifiable with the objectives or goals which are chosen for it. In the old-fashioned language of the Platonist, the general point of an education belongs to the world of Being, which is eternally with us, whereas the particular objectives of an education belong only to the world of Becoming. The distinction is one between an ideal end and the means to be actualized in serving that end. There is no absurdity in the conjunctive proposition that Smith has reached his particular objective and that Smith's whole enterprise was pointless; but if the proposition is true there is absurdity in what Smith has been up to. This is the very complaint traditionally directed against those scholastics who took such pains to discover that an infinite number of angels could dance on the head of a pin. Pedants and misers are poured from the same mold. The miser who finally succeeds in accumulating a million dollars can have as a further objective the amassing of yet another million, yet as long as he remains a miser he still has no Future. The success of an enterprise does not guarantee its having a legitimate point. Success is not fulfillment. Indeed, success only underscores the pointlessness of those of our activities which are pointless. They have no Future. What the Ghost of Christmas Yet to Come tacitly brought home to Scrooge was that activities lacking humane direction though repeatable in the future are only repeated by fools.

As I am using the terms, the "aims" and the "objectives" of education are not identical but complementary. Aims without objectives are empty; objectives without aims are blind. An aim is an ideal -- e.g., health, justice, integrity -- which enlightens an enterprise by giving it a Present as well as a Future. An objective, on the other hand, is a means to be made actual -- e.g., accumulating a certain sum of money, learning the alphabet. Objectives, however, can serve as relative ends in that they may be arranged in hierarchal order -- e.g., learning the alphabet may be a means to learning to read and write, where learning to read and write may

be a means to yet other more complex objectives, etc. Both aims and objectives are goods: but aims are naturally desirable for their own sake; objectives, however, are chosen. (In games final objectives are treated as if they were naturally desirable for their own sake, and there is ordinarily a sense of fulfillment in winning if the game is recognized as only a game.) The reason for choosing objectives is that they are instrumental in obtaining what is desirable for its own sake, a fact which fools overlook, as George Berkeley noted in 1713 in a Guardian essay entitled "Short-Sightedness":

But as wise men engage in the pursuit of means from a farther view of some natural good with which they are connected; fools, who are actuated by imitation and not by reason, blindly pursue the means, without any design or prospect of applying them. The result whereof is, that they entail upon themselves the anxiety and toil, but are debarred from the subsequent delights which arise to wiser men; since their views, altho' they have a relative goodness, yet considered absolutely are indifferent, or it may be evil. (1)

If this be folly, then that is how we must characterize American education. We demand that our school teachers be fools. As R. S. Peters has remarked:

There is not so much need for American [as opposed to English] school teachers to be authorities on their subjects... What is expected of them, however, is that they should be experts, to a certain extent, on methodology. They may be thought to be as other men in respect of their knowledge of their culture. But in respect of their knowledge of children and of how the culture can be transmitted to them they are expected to be much more knowledgeable. The demand is that they should be experts on means rather than authorities on ends. (2)

What counts in American education is expertise, technical proficiency, competence, mastery of detail -- at the expense of authoritative vision. Unhappily our once vocal student critics of American education were only too right: it lacks relevance. As in a pornographic film, it is all technique without love or genuine passion, all vacant groping, mouthing, and thumping. Teachers try vainly to master their pupils, and pupils try vainly to master the subject matter; but it is only technique which can be mastered, and what one masters is never an object of love. Yet teachers are expected to manipulate their pupils in the

monstrous belief that to be educated means to be able to reproduce on command specific "behaviors". Of course the language becomes perverse, too. For example, the word 'personalized' in P.S.I. (Personalized System of Instruction) means that the "pupil" (read "pigeon") is conditioned to its standardized routines on its own time schedule, not that the student learns to become human through his own reflective and critical reason, whatever be the technicalities he must master to do so. American public educators are to be only methodologists in education; and their pupils, when there is no other model to follow, are turned out as methodologists in whatever. From the viewpoint of the myopic methodologist it makes no difference what the "whatever" is -- as long as it is marketable. That is the only point left to American public education: to sell itself. It is the pimp to its own prostitution. The highest bidder is usually the business community; and so the inherently aimless enterprise which is American education tends to be hired out to private corporate interests, which, as we have been rediscovering of late, are not always representative of what is most noble and humane in the human spirit. The Pythagorean Parable of the Festival points to nobler sorts who attend the Olympic Games than those who go to sell their wares: there are the competitors in the Games, who are prompted by a sense of honor; and the noblest of all are the spectators. In our society we have done worse than corrupt the spirit of competition, which we tie to the sales pitch: we have gone to the extreme of blinding the spectator.

What is especially alarming is that the increased pressure for accountability is now taking the pedantry of the schools and escalating it into fanaticism. The fanatic, George Santayana reminds us, is one who redoubles his effort after he has forgotten his aim. The educational fanatic is a pedant with a vengeance. Without any inherent pedagogical aim in view, he makes a cost analysis of the operation and then tightens the screws to increase efficiency -- or so he says. What he really does, of course, is render education even less effective than it might otherwise be. Even the traditional American indifference or open hostility to genuine educational values is less of a menace than this ploy. It is a greater menace because the deceit may go undetected. While any educator worthy of the name should welcome incentives to practice real economies -- educational resources are far too precious to waste -- he should not be compelled to become an accomplice to the genocide of his own profession. And if not in actual practice at least in theory an educator is a professional. By this I do not mean that he is paid for his services. (Indeed, unless he is an outside consultant or an administrator, what he is paid is scarcely the "penalty" Socrates claimed he really deserved, which was free meals at the Prytaneum.) What I mean by calling him a professional is that his proper function, like that of the physician, is to subordinate his technical

prowess to the appropriate end. I take it that the end of education has to do with the intellectual health or integrity of the individual and the community. The trouble with the educational fanatic is not that he demands too much accountability. The trouble is that he demands too little. Although we cannot hold the physician ultimately accountable for the health of his patient -- the physician can only assist nature -- nonetheless we do hold him to more than mere technical competence. He must be committed to the realization of the ideals of his profession, which requires a high degree of personal integrity, as reflected in the traditional Hippocratic oath. We would be horrified to think that he did not have at heart the best interests of his patient. If he were devoted exclusively to reaching technical standards of perfection he might just as well be an instrument for either his own or others' greed or hatred or fear or ambition. His practice of medicine would be engulfed by the trivial, the useless, the unnecessary, even the harmful. We allow that on occasion he must suspend normal procedures for the sake of the patient. (The operation was a success! The patient? Oh, he died.) Pressing the physician to make his procedures more "efficient" without considering the effect on the patient is to render him professionally impotent. The guarantee that a physician has mastered fundamental methods, skills, and techniques, though necessary, is not sufficient to prevent malfeasance. In addition to his competencies he must have a dedication to the humane values of his profession and the sagacity to employ his competencies in the service of those values. We judge the physician according to these criteria because we do not consider the practice of medicine to be inherently pointless. But the educational fanatic is fanatical because he has a contrary view of education. He concentrates on increasing the educator's "efficiency" in meeting "objectives" because he can find no real point to an education: he sees only the means and not the end. His avowal of concern is really a mask for his disavowal of the educational enterprise. Meletus, who accused Socrates of impiety, bears a name which means "one who cares"; but he does not really care about the young. The teacher who must meet educational objectives not because they are desirable or necessary means to legitimate educational ends but because they are thought (wrongly) to provide a convenient measure of his merit is put into the same unfortunate position as the student whose real reason for taking an academic course is to receive "credit" for having done so, and who wants to learn only what he is told will "count" toward his grade. Institutions of higher learning fostering this perverse thinking officially designate all earned academic units which do not apply toward the minimum requirements for an academic degree as "wasted" units. One somehow pictures the faculty as impregnating students by means of academic units so that the students who "carry" these units can populate the world with academic degrees. What the student himself gets out of this is best left expressed in the vernacular.

Yet the illusion of a Future persists. What provides that illusion is our inordinate devotion to planning for the future. Just as in the classroom the lesson plan takes precedence over present purpose, so too at the institutional level five-year or ten-year planning masquerades as enlarged vision. We act as if stating and meeting objectives were one and the same as fulfillment. Now Epicurus and Machiavelli taught us, and rightly, that we should act with an eye to the future: because of the likely consequences of what we do and because Fortune is fickle. But it is one thing to be prudent with our present resources, like Aesop's Ant as opposed to the Grasshopper; and it is quite another thing to act aimlessly in the belief that only the future, despite its uncertainty, can provide us with our present raison d'etre. Even for the undeveloped and growing pupil, there is no Future without a belief in the inherent value of what is already present. If we really want to deny American education a Future all we have to do is to continue to deny the value of the present. There is only the illusion of a Future, the shadow and not the substance of an educational enterprise, for those who fail to discern that portion of the Truth which Lionel Trilling has located in a novel of Jane Austen:

Mansfield Park ruthlessly rejects the dialectical mode and seeks to impose the categorical constraints the more firmly upon us. It does not confirm our characteristic modern intuition that the enlightened and generous mind can discern right and wrong and good and bad only under the aspect of process and development, of futurity and the interplay and resolution of contradictions. It does not invite us to any of the pleasures which are to be derived from the transcendence of immediate and pragmatic judgment, such as grave, large-minded detachment, or irony, or confidence in the unfolding future. It is antipathetic to the temporality of the dialectical mode; the only moment of judgment it acknowledges is now: it is in the exigent present that things are what they really are, not in the unfolding future. (3)

Documentations

1. George Berkeley, "Short-Sightedness," Guardian Essay No. 77, Tuesday, June 9, 1713, in The Works of George Berkeley, ed. A. A. Luce and T. E. Jessop (London: Thomas Nelson and Sons Ltd., 1949-57), Vol. VII, p. 210.

2. R. S. Peters, Ethics and Education, American edition, Keystones of Education Series (Atlanta: Scott, Foresman and Company, 1967), p. 162.

3. Lionel Trilling, Sincerity and Authenticity (Cambridge, Mass.: Harvard University Press, 1972), pp. 79-80.

SECTION V

MUCH OF THE FUTURE WILL BE LIKE THE PAST

JACK PITT

The more things change, the more they remain the same.
(Alphonse Karr)

In a technological age it is easy to suppose a discussion of the future must focus on change, on how things will differ in times to come. Yet in hypothesizing about the future it is as important to posit what will stay put as to assess what will be new. In forecasting one must adopt constants as well as variables.

In what follows I wish to draw attention to three related constants within which foreseeable changes in education will occur. These factors are already present in Man and in society, and it is my contention that not only will they remain, but that they will encompass and control the scope of whatever changes are introduced into educational practice. I shall also outline a stance or point of view which teachers or professors may adopt given the constants I shall describe.

Man is a predator; he preys both on other species and on the members of his own. When preying on the members of his own species his predation is exhibited primarily in his exploitation of human resources -- the utilization of the labor, skills, and other capacities of his fellows for his own personal benefit. Grim perversions of this trait are found in such practices as torture, mass imprisonment, and the systematic execution of selected human groups, all of which practices have flourished in this century. Though people are sometimes pleasant, Man is not a pleasant species.

The most singular feature of Man's predation is the enormous degree to which it is practiced within the species. As in all predatory activity, there are generally winners and losers. But whereas his predation upon other species normally involves their physical consumption, his intra-species predation usually does not. Here the winners are inclined to make more sophisticated arrangements for the losers, arrangements intended to be of greater usefulness than a collection of corpses. Thus the losers become slaves or workers who serve in more subtle ways the needs and interests of the winners. They plant and harvest their food, they make their clothes, they look after their children.

Most of the time the winners need only a limited number of workers from the pool of losers. Furthermore some losers are unable, and a few unwilling, to serve the winners. Thus a third group, useless losers, emerges.

The perception of society as comprised of three unequal classes is very old and has been responded to by some as a fundamental historical given, and by others as a moral outrage. With reluctance I accept the former view, not only because of Man's predatory tendencies, but due to the following related factors which are unlikely to change to any significant extent. (1)

1. Differential ownership or control of property by individuals within society.
2. The continued existence of the family, which serves to transmit if not money then influence, culture, skill and wordly wisdom.
3. The many individual differences due to inherited biological factors.
4. The division of labor required by society, and the resultant differential allotment of prestige.
5. Finally, the fact that there is both a growing shortage of the world's goods as well as an increased demand for such as remain, a situation which fosters rather than diminishes predatory behavior.

In the above we see a second constant within which future educational changes will occur, namely that we will continue to teach within the structure of a class society. It is correctly perceived, both by opponents and supporters of the class society, that the schools (kindergarten through the doctorate: K-D), are a vital instrument in defining class membership and sustaining the class system. The suggestion by some writers that we get rid of schools is perfectly sound strategy for one who also believes a classless society to be possible. Capitalism, imperialism, the industrial state, as we know them, could not exist without the school system. A lethal blow would be inflicted on this evil trinity by abolishing schools.

One notes that imperialistic capitalism is precisely the type of political-economic organization one would expect from a cleverly evolving predator. And while it may change in outward form -- for instance, economic imperialism may continue to displace military imperialism -- the substantive nature of the class relationships involved will not alter appreciably. The industrial state will have to be curtailed if we are to survive. It, however, is not essential to a class society, but simply a dominant element in the class society of the moment.

While there is still a third constant I wish to cite as delimiting educational innovation it will be best mentioned in a later

context. Right now I would like to consider what teachers might best do if it is true that they must function in circumstances like those outlined above. This discussion will be facilitated by developing along the lines of Everett Reimer, (2) a distinction between schooling and education. The main differences are in the manner in which knowledge is presented and sought in each case. We may refer, that is, to its packaging or delivery system on the one hand, and to the use or purpose for which knowledge is acquired on the other.

Schooling (K-D) as a public institutionalized procedure for disseminating knowledge really does require much of the apparatus we are familiar with -- certified teachers, a fairly standardized, certified curriculum, and a special group of people called students who follow the curriculum. These students must be graded according to pre-established tests, and must be expected to move in a linear progression from one level or grade to the next. There will necessarily be a systematic elimination of students at key points in the system. It is generally understood that student performance is affected as strongly by factors outside the school (e.g., economic background) as by what occurs within. At the key points in the school system there usually will be the public awarding, or withholding, of certificates of performance -- diplomas or degrees. Finally, schooling requires schools -- enormous physical plants wherein the schooling occurs. Schooling costs money.

The purpose of schooling (as distinct from the purpose of education), is to locate or place people in the (hopefully) appropriate slot in their society. Few are fully satisfied with how this is done. They will say reforms are needed, yet in so conceiving the matter they concur with the above stated aim of schooling. Throughout most of the world schools are the custodians of the rites of passage.

Education, on the other hand, does not require schools, grades, tests, state certified teachers or curricula, and in its early stages may be less expensive. It does require persons who spontaneously or in a self legislated way want to learn something. Naturally these persons must have access to that about which they wish to learn -- motors, art works, musical instruments or whatever. Probably they will want access to someone who knows more about their chosen interest than they do, and finally, they likely will wish to meet others with the same interest. The purpose of education is knowledge for its own sake, an end, it is hoped, that will enable the person and raise the cultivation of the society.

When the distinction between schooling and education is presented in this chemically distilled manner (3) it appears as an irreconcilable

confrontation. By and large teachers profess it distasteful to suppose they are simply part of a mechanism whose fundamental purpose is to preserve a status quo required by a ruling class. Also, most of them would profess to believe that knowledge is inherently a good thing. Yet it may seem they cannot have it both ways. They ought, then, either surrender their educational ideals, or resign from schooling. The first course commits them to spiritual bankruptcy; the second to economic bankruptcy.

This, alas, is not simply an abstract dilemma. Many teachers have faced it and do face it. And their fate has often been a good deal worse than economic bankruptcy. I submit, however, that this dilemma, in any acute form, is not at present the common condition of the majority of teachers in the United States.

What, then, is our situation as teachers, and what stance should we adopt in response. Certain implications of the two constants outlined above are relevant here. One is that schooling and schools are not going to disappear. In proportion to the population they may decrease in number, yet in becoming scarcer they will increase in importance. The government may even encourage "learning centers" run by churches, businesses, or private citizens, and these could be very valuable, but they will not constitute a serious threat to the present function of the school system. Schooling is in too deep a collusion with the aggressive and competitive side of Man, and supports too broad and powerful a spectrum of socio-economic interests to be vulnerable to any presently foreseeable rival.

A second point is that a fundamental ideal of the most articulate critics of schooling -- an ideal sometimes encapsuled in the phrase "knowledge for its own sake," or even in the word "education" if uttered a certain way -- is precisely that, an ideal. As a heuristic concept it may be admirable, but when taken as a description of reality upon which social or educational policy might be based it is allied to a fundamental error. For built into this ideal is something akin to Aristotle's hopeful sentiment that persons naturally desire to know. Persons usually do want to know what is necessary to survive, and many have a passing curiosity in what goes on about them. But the number of people who want to know in the sense that their desire gives rise, however modestly, to private culture or public civilization is extremely small. Briefly, this is due, I suspect, not so much to unevenness in the distribution of intellectual capacities, but to the failure of most of us to meet the enormous demands in terms of dedication, discipline, or just plain self-legislated hard work which even minor personal achievements require. The truth would seem to be, and I shall claim this as my third constant governing educational

innovation, that very few people are very good at anything requiring knowledge unless it is hinged on to economic gain or survival. This would not be the case if people naturally desired to know in the Aristotelian sense. This point is also of significance because so much criticism of schools by proponents of alternative institutions is based on an unwarrantedly high degree of optimism regarding Man's altruistic dedication to knowledge.

In the face of the above, the position of the teacher is something like this. He is a freely cooperating member in an enormous and complicated institution which is far from innocent either psychologically or politically. He must first recognize his own position, and the historical status of the institution he serves. Thus, for instance, he should not claim to be egalitarian while participating in a system that emphasizes the inequalities among people, and their historical or social differences. Nor should he romanticise his occupation so that inevitably he will be soured by how removed it is from our, no doubt idealized, view of Plato's Academy. At the same time, neither need he be timid about promoting education or supporting the ideal of knowledge for its own sake. This can be elaborated in his own life as well as in the teaching role. For the mutually exclusive distinction between education and schooling is but an artificial distillation of elements rarely found alone. What is in fact usually present is an amalgam containing both elements in various proportions. It is rhetorically irresponsible and cynically unfair to most teachers to claim or imply that little or no education occurs in the schools. Obviously it is true that a great deal of education also occurs outside as well. But to recognize that schools do not provide all education is not to show they provide none.

Each teacher needs to judge to what degree he can mix education with schooling. He must be prepared to take risks, even as those in other professions take risks. His judgment should be affected by his estimate, not only of his own commitment, but of how many students really want education as well as schooling. He should not over estimate, the number may be quite small.

Secondly, if he would serve education he would need to calculate the receptivity of his environment (fellow teachers, chairman, the community), to education, and he must exhibit some political sense in how he goes about supplementing the requirements of schooling.

Thirdly, there is no reason why a teacher might not engage in education as an extra-curricular activity. If he believes the school system restricts him too much, yet it is not reasonable for him to leave,

he could announce evening or weekend sessions, with or without fees, at which he might accomplish what the system obliges him to exclude. This would be a useful test of everyone's dedication to the ideals of education.

In concluding, I want to return briefly to comments made in the early part of this paper. I said Man is a predator. By that I mean that this is a fundamental mode of his being -- a profound aspect of his history or biography. I also accepted a class structured society as an historical given, which is not the same as to say it is logically necessary. There has been little space to argue in support of these claims, but my final observation does not rest on whether they are correct, but rather on the priority assigned to the questions that give rise to them -- questions about the status of persons and society. In writing about schools we too often restrict ourselves to curriculum reform, or teacher-pupil relationships, or the use of technical aids as if these issues arose and could be settled in a philosophical-social vacuum. This isolated procedure tends to result in fadism, sloppy forms of egalitarianism, and gimmickry. Suddenly there is a spate of courses about Africa or over-population. Amateurish attempts at group therapy find their way into the classroom. Mechanical aids double or triple in number. It is not that any of these innovations is inherently wrong, but rather that they are seldom grounded in any explicitly stated philosophical point of view. Very little historical consciousness underlies most reformist activities, which consequently lack depth or permanence. Unless it lays out its assumptions concerning Man's status and his possibilities, all writing about education is bound to be superficial and question begging. Serious educational proposals must arise out of a philosophy of Man and his history.

Documentations

1. The first three points are developed in detail by David Lane in his analysis of contemporary Russian society, The End of Inequality? Penguin, 1971. See especially chapter 6.
2. Everett Reimer, School is Dead, Doubleday, 1971.
3. Rhetorically, at least, it is made this way by Ivan Illich in Deschooling Society, Harper and Row, 1970.

SECTION VI
THE FUTURE:
ASSUMPTIONS AND CONDITIONS OF MEANING

JOSEPH ENGLE

Our knowing is always operational. It is never merely passive and random 'observation'. ... It is always more or less experimental. It is false, therefore, that our knowing makes no difference to the object it knows.
F. C. S. Schiller

Introduction

The topic, or in the language of methodology, the controlling category regulating the inquiries for this conference, is futuristics. Alvin Toffler, perhaps the most popular advocate of futuristic considerations, gives the following definition:

The word (futurist) now denotes a growing school of social critics, scientists, philosophers, [my emphasis], and others who concern themselves with the alternatives facing man as the human race collides with an onrushing future. (1)

Futuristics is seen, here, as a category which permeates various disciplines in an effort to utilize the inherent structures and subject matter content of these disciplines to confront the question "What will the future bring?"

Is this the primary question? Is there something even more fundamental? Doesn't the very assertion of the question necessitate an assumption; namely, that there are such things as futures to be investigated? In other words, an investigator, prior to any inquiry into futures as competing alternatives, must possess an adequate set of assumptions which define experience such that there is the very possibility of considering a future. The explication of these assumptions is the most fundamental task facing all futures which can be stated as theoretical propositions. This explication is within the office of philosophy.

Consequently, Toffler has committed a generic fallacy within his definition of futuristics. He has serially grouped various academic disciplines including philosophy, when, in principle, philosophy is generic to other areas of inquiry. Philosophy examines the assumptions which make the other disciplines possible; it is the integrative discourse.

It is the manner in which futures can be qualified in terms of the assumptions and by the exposition of these assumptions that concerns this paper.

Future: An Inquiry Into Primary Assumptions

The history of reflective thought has been one of trying to explain the relationship between man and his experiential existence. In explanation of the source of man's knowledge, a dichotomy has emerged within philosophy. On the one hand, the objects found in experience are inherently inter-related and are independent of man and his interactions; this premise is basic to all empiricists. Or, on the other hand, the knower having somehow determined the structure of experience prior to contact with the objects "in experience," ascribes or constructs the objects and their relationship to one another. This premise is more characteristic of some kinds of idealism and often of pragmatists.

The importance in selecting one of these two positions is that they can be seen as opposite ends of a continuum of meaning. The continuum seems to be fundamental to the perpetuation of any discussion or analysis of experience. In turn, then, when an investigation adheres to an assumption, this assumption dictates the patterns of all subsequent inquiry to be conducted. The category of futuristics, then, must be dealt with in terms of the kinds of assumptions held by the inquirer.

The first of these two positions on experience is held more widely than the "construction" of relations concept. Alvin Toffler, as quoted in the introduction to this paper, speaks of a collision between the human race and the "onrushing future". Apparently, Toffler grants an independent existence to reality from which information is gained defining its structure. If so, then dealings with a real future become anticipations of consequences in an effort to avoid, or at least alleviate, the dreaded devastating time disorientation he elsewhere refers to as "future shock".

In the same manner, Theodore Gordon envisions the future as a range of possibilities. Man is assigned the role of decision-maker and assumes the task of forecasting the possible futures. With the following warning Gordon exposes his primary assumption:

There are some important caveats about forecasting the future that must be noted. First, there is no way to state what the future will be. Regardless of the sophistication of the methods, all rely on judgment, not fact. (2)

The implication is that the future has an existence outside man's existence and that knowledge about the future is unknown until it has

actually made its appearance and informs man of its composition.

Adherence to the empiricist position that knowledge is gained from experience seems to be confronted with a perplexing problem: how are necessary, universal propositions (such as those exhibited by mathematics) possible, if knowledge is grounded upon generalized inductions derived from subjective conditions?

It was this criticism, in part, that forced Kant's rejection of Hume's empiricism and formed the basis for his epistemological position. In Kant's words:

If intuition must conform to the constitution of the objects, I do not see how we could know anything of the latter a priori; but if the object (as object of the senses) must conform to the constitution of our faculty of intuition, I have no difficulty in conceiving such a possibility. (3)

Although Kant doesn't address the category of futuristics in the modern denotation of the term, extrapolation of his Transcendental Idealism would seem to yield a definite position. Since all experience, to be experience, must lie within man's unity of consciousness and is therefore conditioned by his inherent categories, the future, as with reality, does not maintain an existence outside of man's existence but is an organization or reorganization of experience already known to man.

This viewpoint, namely that the objects of experience are ascribed meaning and relationship by the perceiver prior to experience, has a number of contemporary advocates. Psychologist Jerome Bruner has asserted that:

The organizing ideas of any body of knowledge are inventions for rendering experiences economical and connected ...the power of large organizing concepts is in large part that they permit us to understand and sometimes to change the world in which we live. (4)

In agreement with this philosophical position are Max Black and Stephen Pepper. The former, electing to use the term "archetype," asserts that there is an "implicit model within every writer". (5) The latter hypothesizes that the "implicit model," may be subsumed into a single primary assumption, a "root metaphor," (6) from which all knowledge about experience is derived.

Subscription to this general position delineates a specific employment of the term future; for, whatever the term may imply, the implications must conform to conceptions constructed prior to experience, in order to make the encounter meaningful. Advancing this notion would necessitate that, prior to any action, conception for that action must have been formulated. Present movements are actually legislated by means of thought which, in a logical time-order, precede action. Futures are products of thought from which the present is constructed. As Saunders has stated, "The future is a strange kind of value imperative whose progeny is the present." (7) When a particular result is esteemed it will be held as a goal and direct subsequent action toward that goal. The only question that would give meaning to the term future would be, "Where ought we to go?"

What I have tried to demonstrate, then, is that regardless of whose position is pursued, Saunders, Pepper, Black, Bruner, or Kant, the acceptance is contingent upon the adoption of the epistemological premise that, through the faculty of knowledge, the objects of experience are ascribed particular meaning and relation.

Still another system of propositions can be generated from the premise that man ascribes meaning to experience. St. Augustine, writing in his Confessions, asks of God, "Who will hold the heart of man, so that it may stand still and see how steadfast eternity, neither future nor past, decrees times future and those past?" (8) Augustine pleads the frivolity of temporal time segmentation in an eternal existence, an existence man will know upon entering the City of God. In such a framework the term "future" makes no substantive appearance and initiates no inquiry.

The implications inherent in the acceptance of such a dogmatically controlled system seem forthright. First, adherence to the position demands the temporal existence of man be subordinated to the spiritual nature, and forces the framework to be closed-ended. The system does not permit growth from acquired knowledge and subsequent expansion in realms which lie outside the doctrines of the established framework.

The ultimate selection of a primary assumption, giving meaning to the term "future," should be a deliberate reflective decision. This decision should not be made upon the examination of an isolated set of assumptions but should be made only after critical examination of competing alternative assumptions.

The presentation of a particular framework should involve three levels. The first and lowest (since at this level ideas can only be

examined within the given structure), is the presentation of one premise as if it were alone and without competition. The second level, and more inclusive (because of the adjunctive structure permitting comparison and contrast of ideas), is the presentation of competing frameworks (as has been done in this paper). Third, and most inclusive (due to its totally comprehensive structure which presupposes the first two levels), is the retroductive presentation which, as Saunders states, is, "Any effort to trace the processes through which something is done in such a way as it takes a second look at the assumptions behind the initial process." (9) At this level, no alternative should be left unexamined, and the selection will be determined by a deliberately held criteria. It is from the third level that theoreticians should operate, since a theoretical system is based upon its primary assumptions. Competing systems can only claim their supremacy after the critical exposition of their assumptions.

The competing assumptions underlying the systems for discussing futuristic investigated within this paper are illustrated by the following chart:

Assumptions Composing Philosophic Systems
Discussed Within This Paper

General Philosophic System	Common Sense Realism	Neo- Kantianism	Spiritual Idealism
structure of nature	an independent existence with an inherent structure	intellectually constructed laws which condition all existence	divine unity in connection with absolute
Method of Truth	correspondence between object and idea	inquiry, the method of science	coherence with accepted revelation
status of reality	maintains an independent existence	a construction within a unity of consciousness	singly created by God
purpose (goals)	discovered from laws of nature	constructed	absolute established standards

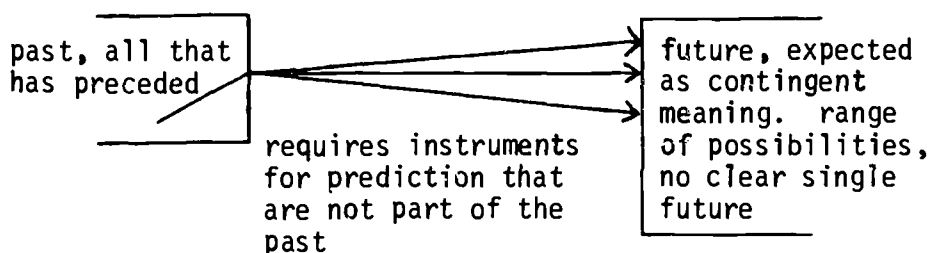
future	independent existence which eventually reveals its real composition	intellectual construction framed as a goal	not applicable
--------	---	---	----------------

This Inquiry: A Reflective Investigation

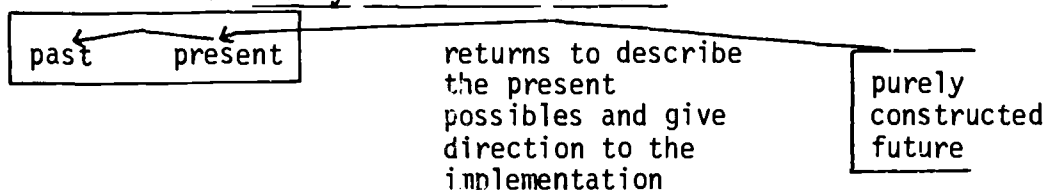
In an effort to escape an obvious criticism, that this inquiry was based upon the dogmatic acceptance of a framework for evaluating assumptions, I am compelled to demonstrate that the particular criterion used stands in competition with alternative criteria. One such competing standard is based upon the relationship between the present and future and the manner in which the future becomes known. The inquiry initiated by this criterion is illustrated by the following summaries:

1. Causal theory of futures: X causes y causes z, etc. relations are necessary and sufficient to each other, a regressive formula equivalent to history.

2. Probabalistic futures:



3. Purely constructed futures:



To hold criteria as the subject matter and place it into various contexts elevates the initial problem involving futures into an inquiry into structure of the inquiry.

The Inquiry Structure

Original Subject Matter
involving "future"

Abstracted Problem
Involving Criteria
as Subject Matter

3. criteria	valued assumption which legislates distinct systems and forms basis for selection	criteria
2. future ₁ , future ₂	competing systems each of which is based upon primary assumptions.	criteria ₁ , criteria ₂
1. future	descriptive presentation of one system	criteria

It is inquiry into inquiry as subsumed within the office of philosophy that warrants my initial claim that philosophy is the most generic of academic disciplines. A proposal of this paper is that philosophy address itself toward the explication of various presuppositions which give rise to theoretical assertions and corresponding practical application. Perhaps this will be facilitated when philosophy investigates its own investigations.

Documentations

1. Toffler, Alvin (ed.), The Futurists. New York: Random House, 1973, p. 3.
2. Gordon, Theodore J., "The Current Methods of Futures Research," The Futurists, ed. Alvin Toffler. New York: Random House, 1973, p. 165.
3. Kant, Immanuel, Critique of Pure Reason, trans. Norman Kemp Smith. New York: St. Martin's Press, 1965, p. 22.
4. Bruner, Jerome, On Knowing. Cambridge: Howard University Press, 1963, p. 120.
5. Black, Max, Models and Metaphors. Ithaca, N.Y.: Cornell University Press, 1962, pp. 241-243.
6. Pepper, Stephen C., World Hypothesis. Berkeley, California: University of California Press, 1942, pp. 84-114.
7. Saunders, T. Frank, "Commencement: Looking Ahead," Address at Tucson Public Schools' Administrative Conference, August 17, 1973.
8. St. Augustine, "The Confessions," Philosophy in the Middle Ages, ed. Arthur Hyman and James J. Walsh, New York: Harper and Row, Publishers, 1967, p. 79.
9. Saunders, T. Frank and C. Decker, Double Think, Tucson, Arizona: Farmington Press, 1973, p. 186.

SECTION VII
MAGISTER LUDI FOR THE TWENTY-FIRST CENTURY

BERNICE GOLDMARK

I

I have learned more from you than perhaps a man should learn, if he wants to remain independent. (1)

It has been said that imitation is the greatest form of flattery. I think not. Far better to be provocative than imitated. It is, then, as provocateur that I mean to flatter Professor Saunders, for my paper was provoked by the papers he has presented to our Society for the past few years, and particularly by the model of inquiry he has developed. (2) As Toulmin says:

It is in fact a great virtue of a good model that it does suggest further questions, taking us beyond the phenomena from which we began, and tempts us to formulate hypotheses which turn out to be experimentally fertile. (3)

Taking off from what I find to be the most tantalizing aspects of Saunders' works, and using other sources and considerations to inform my fancy, I will offer in this paper, not an organized critique, but some thoughts about "models," "games," and "inquiry," to expand our thinking about these constructs.

In the paper presented to our Society in 1972, Saunders uses the term "Pure Game Theory". This puts me in mind of the Bead Game in Hesse's *MAGISTER LUDI*. (4) Although Hesse's Game Model is a technique for fiction and more poetic than Saunders' structured model, a comparison of these two alternative "games" might help us to understand Saunders' position so that some questions can be raised about it.

Hesse describes his Bead Game as a

highly developed, secret language in which several sciences and arts, particularly mathematics and music, play their part and which are capable of expressing contents and results of nearly all the sciences and of placing them in relation to each other.

The game is

a device that comprises the complete contents and values of our culture; it plays with them as, in the springtime of the arts, a painter may have toyed with the colours of his palette.

Hesse's Game Players play on an organ which is a "static structure with a whole world of possibilities," creating new "unity, harmony, balance". And the Master Game Player is Hesse's Magister Ludi.

Saunders' Game is represented by his Inquiry Cube. (5) This consists of three columns (depths): context inquiry, language inquiry, and value inquiry. Each column has three levels for inquiry: inquiry into content, inquiry into context, and inquiry into values. Thus by proceeding through the nine boxes one can inquire into the content, context, and values of alternative contexts, language and value positions. In addition there are two uses for the model that are not built into the cube: inquiry into content and inquiry into form.

The values underlying Hesse's Bead Game are best defined by his terms, "unity, harmony, and balance," and by his description of the Game players as

. . . men beyond all originalities and peculiarities
and who have succeeded in achieving the most perfect possible
self-identification with the general and in rendering the most
perfect possible service to the supra-personal.

At first glance it would seem that Saunders' values are also focused on the higher levels of generalities. (6) But a better acquaintance with his writings and teachings reveals that this method of thinking is only a means to another end: the reconstruction of experience. What is valued is not a unity, but a pluralism -- a society of individual, responsible decision makers reconstructing personal experience and society. Saunders values a dynamic process of reconstruction rather than an ideal of "unity, harmony, and balance". (7)

If I am correct in my understanding of the values underlying these two alternatives, then I need next to ask two evaluation questions: 1. If I were Magister Ludi of the 21st Century, to which value position would I subscribe? and 2. Are the means and methods of the alternative I select adequate for achieving the ends, and are the means-ends-methods appropriate for the value commitment?

II

Since Adam and Eve ate the apple, man has never refrained from any folly of which he was capable. (8)

Acting as Magister Ludi of the 21st Century I need to evaluate the two 20th Century models I have described in terms of a context as yet unknown but sufficiently imagined to cause concern. We are familiar with the predictions for the 21st Century: resources will be depleted and replaced by man-made materials, organs will be transplanted or replaced by mechanical ones, memory will be transplanted in living organisms, genes will be controlled, social roles will be changed, nations and cultures will be annihilated. Characteristic of our future will be two features: rapid changes and crucial decision-making. For this future Hesse's *Bead Game* values (which are not Hesse's values) of "unity, harmony, and balance," seem inappropriate, not only because of the impossibility but because of the undesirability of such a state. As with any model of an "engineered" society the questions of who makes the decisions about the criteria for most perfect and most harmonious, and the consequences for dissenters and original thinkers, are sufficient for me to reject the alternative. Saunders' values, continual inquiry, responsible decision making, intelligent judgments for futures, reconstruction of experience, seem far more valuable for the 21st Century we are predicting. From our present vantage point I find this value position to be as Saunders himself has said, the best possible mistake we can make thus far.

Selecting, then, the value position underlying Saunders' model, I need to ask now about the adequacy of his construct to realize these values. In my evaluation I find a number of difficulties with the model, some of which I'll mention briefly and some of which I'll discuss more specifically.

One difficulty I find is in Saunders' use of the term "immediate". If all "meaning" is legislated, then all "knowledge" (whether theoretical or qualitative) is mediated. What then gives "immediate" experience status on Level I? If it is known then it is mediated; if not known and not mediated how then can it be acknowledged, no less described, on Level I? I won't pursue this in this paper because I think it is a most neglected problem in philosophy and requires considerable more attention and inquiry than I can give it in this paper. And then, Saunders' vagueness with the concept "immediate experience" puts him in the good company of a host of philosophers, among them Dewey, Lewis, and the Phenomenologists. (9)

A related problem has to do with the relationship between cognitive and qualitative (aesthetic) inquiry. There seems to be some confusion of kinds of categories in Saunders' cubes. Is, for example, inquiry into "Language" (cognitive) of the same kind as inquiry into "Values" (qualitative)? Are there inquiries into language and values that are qualitative, as well as inquiries into language and values that are cognitive? If so, how would they be alike? different? related? I won't raise further questions in this area because I know that Prof. Saunders has been inquiring into the problems of the qualitative (with his left hand?) and perhaps some of his future works will treat these problems.

A second difficulty I find in the Saunders model is the failure to distinguish between "Game Theory" and "Pure Game Theory". (10) In his 1972 paper Saunders charts categories in which he compares three alternative assumption systems: Realism, Neo-Kantian Experimentalism, and Methodological Conceptualism. In the category "Primitives" he has "objects and ideas" for Realism; "ideas as instruments" for N-K.E.; and "game theory" for M.C. In the category "Substantive Model" he has "measurement" for Realism; "discourse" for N-K.E.; and "pure theory".... "Theory for theory" for M.C. Finally, in the overarching category "Model for Models" he has "Methodological Unity-Decision Bases for Model Construction-Pure Game Theory". It seems that Saunders is inquiring with his "Model for Models" into his model (Methodological Conceptualism) using the tools of the model. Surely, as has been said, a machine can't apply itself to the differential calculus on which it is based. Surely Saunders would not inquire into and evaluate Realism with the methods of Realism, nor Experimentalism with the methods of Experimentalism. How then inquire into M.C. with the methods of M.C.? If "Pure Game Theory" is different from "Game Theory" then what is the difference?

A related difficulty is the use of the terms "Game" and "Model" (and, "Pure Game" and "model for models") interchangeably. I would think that the terms are quite distinct and that each when used requires more specific definition. A host of questions concerning each term arise in my mind. If the term "Game" is used, then I want to know not just what the game is, but when we are playing it, how we know we are playing it, when we are not playing it and how we know that we are not playing it. If all of "giving meaning to" is a game then is to "give meaning to" as a Realist, an Experimentalist, and a Methodological Conceptualist playing different games, or playing different types of games? What about the rules of the game? What type are they, rigid or flexible? Does the player need to understand the rules? What happens when the rules are not followed? Do we need to know, as Ryle claims, not when we are not deceived, but when we are? Can we be out of the game -- in the kitchen for a beer? Is inquiry

a game, or like a game? Have we come to believe the metaphor? Is man, as Peters says, a chess player writ large? How does the game itself determine the very questions we ask? Where will we find the answers -- inside the game? outside the game? in another game? in the "Pure Game"? And how does the "Pure Game" differ from the Game? (11)

A similar set of questions arise concerning the use of the term "model". What is the difference between a model and a "model for models"? What types of models are these? If analogue models, do they represent "what is" or what is imagined? (12) Or are they theoretical models, a pictorial representation of an explanatory theory? Are they constructs whose function is primarily heuristic? How are the models like, and different from, games?

The questions raised here are sufficient to suggest that the concepts "game" and "model" need far more "unpacking" and specific definition to give them determinate meaning in Saunders' theory. As they have been used thus far they are vague -- a cardinal sin in Saunders' own value position.

A more serious difficulty that I find with the Inquiry Cube are the basic assumptions about discreteness, sequence, and relatedness. When the Cube is used as a tool for inquiring, the substantive alternatives inquired into (Whether theories, discourses, or philosophic systems) are isolated as discrete unified and stable wholes. Furthermore, the separate alternatives are inquired into in steps (levels) in the order of increasing conceptual "power". The model is supposed to be multi-linear rather than linear; multi-directionally sequenced rather than sequenced in a single direction. I have some question, however, about the linear sequence of the levels. Could it not be said for example, that "all Type A descriptions (Level I) are included in the class Type A theories (Level II) and all Type A theories (Level II) are included in the class of Type A discourses (Level III)? If so, then the relationship between the steps (levels) of inquiry would be a logical one of inclusion rather than a linear one. How then would the columns be related one to another? What, for example are the relationships among the context inquiry, the language inquiry and the value inquiry? Would this also be one of "inclusion"? What is the value assumption of this relationship in Saunders' model? And how does the inquiry into content relate to the inquiry into form? Again, inclusion? Explanation of these relationships could be very fruitful. Perhaps the categories in which these relationships can be made are a part of the "Pure Game" model not yet constructed. One problem for its construction, then, would be the relationships among different types of models ("target," "sequence," "relational contextual").

I have questions also about the categories for relating alternatives one to another. Saunders; standard set of categories: means-methods-ends, criteria, values, assumptions, enable us to compare discrete items in different alternatives. One can, for example, compare the means-methods-ends, the criteria directing the judgments, and the underlying value assumptions of Behaviorism and Freudian Psychoanalytic theory. But with the Inquiry Cube model we must always treat the subject matter (theory, discourse, philosophic position) as discrete, unified, stable and full-grown. Perhaps the lack of categories for relating emergence, development and change puts us in danger of missing significant new meanings to "legislate". Should one assume that theories, discourses, and philosophic positions arise full-blown like the Phoenix and exist in a "pure state" stable and whole? Should one give meaning to, and evaluate, alternatives as isolated phenomena without regard for ground, for context, for conditions of boundaries, for emergence, for development and for limits?

If the value of the inquiry is the reconstruction of experience, then shouldn't we know more about the conditions and limits of reconstruction of whatever we are inquiring into than the model allows? How can a model that ignores reconstruction of concepts in its use, result in reconstruction? The emergence, development, and changes of a concept, theory, discourse or philosophy seem important categories for inquiry if we want new emergence, development and changes. For example, Saunders' own inquiry into philosophic positions in his 1972 paper would be more fruitful if his model included categories for inquiring into change. Certainly the concept "Realism" in philosophy developed and changed as did the concept "Experimentalism". Why, for example, does Saunders use the term "Neo-Kantian Experimentalism"? Is it distinguished from another "Experimentalism"? Why does he now use the cumbersome term "Methodological Conceptualism" rather than "Methodology" which he used some years ago, or "Conceptual Idealism" which he used later? Surely there is significance in the emergence, development and changes of the name of the game. And, surely, if a reconstruction of philosophy is the goal of the inquiry, then the process of reconstruction needs to be inquired into if the model is to be deemed adequate. There is something entirely too static in a model that cuts and boxes, that does not provide for categories for inquiring into change, when the goal of the model's use is supposed to be reconstruction. Such a model would have to be judged inadequate for the values stated for the 21st Century which we predicted will be characterized by rapid change and will require continual evaluation and reconstruction.

III

It matters little what you believe, so long as you don't altogether believe it. (13)

In WITTGENSTEIN'S VIENNA Toulmin and Janik paraphrase an old chestnut about history saying, "those who are ignorant of the context of ideas are, similarly, destined to misunderstand them." As Magister Ludi for the 21st Century I will try now to suggest some categories for an inquiry model that will enable us to inquire into, not only theories, discourses, and philosophies, but also the contextual relationships from which they emerge, and in which they develop and change. I have found that most help for this approach in the works of Foucault. Despite Foucault's repetitions, circumlocutions, hyperbole, and vagueness, which make his work infuriatingly obscure, I found his ideas exciting and promising for the reconstruction of an inquiry model. (14) I am not at all prepared to construct a new model, but can only suggest some of the ideas that Foucault has developed for consideration for future model building.

Foucault says that we cannot inquire into discourses as if they arise from silence. There is not "nothing" and then a structured discourse. He is not concerned with the status form, structure, and content of the discourse when it is abstracted for inquiry, but with the conditions which were brought together at a very precise moment of time in order that "its objects, its operations, its concepts, and its theoretical options could be formed". (15) As Kermode explains, Foucault wants to uncover the network of "resemblances and discontinuities that constitutes a systematic constraint on what, at a given period, may be said to be the case". (16) His "episteme" is not the sum of the knowledge of a period, nor its style of research, nor the pattern of dominant (and alternative) values and assumptions, but "the totality of relations that can be discovered for a given period," -- the deviations, distances, oppositions, differences among multiple discourses. (17) His focus is on modifications and transformations, not psychological, but logical. He wants to know not just the "meaning" of terms, but "the law of existence of the terms, that which has rendered them possible -- they and no other in their place; the conditions of their particular emergence; their correlation with other previous or simultaneous events". (18)

A major category of Foucault's theory is "discontinuity". He wants to inquire into the "limits of a process," "the inversion of regulatory movement," "the boundaries of oscillation," "the threshold of a function," "the instant at which a circular causality breaks down". He states,

Discontinuity is no longer an obstacle to the work;
no longer an external condition that needs to be reduced --
but a working concept. (19)

Other categories for inquiry are: difference, threshold, rupture, transformation, series, limits.

Saunders' model of inquiry has the inquirer describing and analyzing, evaluating and reconstructing. Foucault's categories can expand the model so that each level can be even more conceptually powerful. For example, when we analyze the language of some discursive fact we ask, "According to what rules has a particular statement been made, and consequently according to what rules could other similar statements be made?" Foucault would have us ask, "How is it that one particular statement appeared rather than another?" This is quite a different question and one that expands the inquiry from the internal rule structure of the discourse to the field of possibilities in which judgments are made. If reconstruction of judgments is the goal of inquiry, then it makes sense to analyze the judgments that resulted in a formulation and in its changes. It makes sense to analyze the conditions of formation, and of modifications, and the network of dependencies within, between and among discourses. To "mark out the points of choice and define a field of strategic possibilities" is to ask for judgments made that allowed or disallowed that and no other element of the subject matter under inquiry.

Although we can never step outside of our own conceptual systems to analyze and evaluate the dynamics, we can by employing Foucault's categories come closer to an understanding of process involved than if we employed only the static categories of Saunders' model. To say that we can never totally stop the motion picture in order to analyze it, is not to say that we cannot provide better handles for latching on to aspects of the movement.

- I have said that Foucault's categories could help to make inquiry more dynamic and would make reconstruction more attainable. I would now like to comment briefly on the political aspects of Foucault's theories. As Foucault claims, political practice transforms "not the meaning or the forms of discourse, but the conditions of its emergence, insertion, and functioning....the mode of existence of the....discourse." (20) These transformations in the conditions of existence and functioning are not necessarily expressed or "reflected" in the concepts, methods, or data of the discourse, but they do modify its rules of formation. Foucault says that it is in the "name of a political practice one can question the mode of existence and the functioning of a science," and he has focused on

medicine as an example. (21) If we are concerned with change, with reconstruction, then we need to be very much concerned with the politics of change -- with the network of related influences, the judgments made as to what rules are allowed and disallowed, directed and limited -- the "how is it that" this rather than that in a realm of possibilities. A static model of inquiry that does not include categories of analysis of emergence and transformation seems politically naïve. Reconstruction resulting from such an inquiry threatens to be merely academic -- an exercise in "what might be" divorced from any inquiry into why (logically) it can or cannot be, or how to make it be.

IV

"Who does not distrust a complete thought?"
W. B. Yeats.

My concern in this paper has been with the possibilities for constructing a more adequate model for inquiry for a future generation. Using Professor Saunders' Cube of Inquiry and his papers and books of the past ten years, I made two major criticisms and suggested one possible alternative route. Subscribing as I do to Saunders' basic value -- the reconstruction of experience -- and accepting his general method of inquiry as a tool for more powerful "intelligencing," I found: (a) the terms of "game" and "model" too vague for use; (b) a failure to distinguish between "game" and "pure game," "model" and "model for model" resulting in the use of the tools of one game or model to evaluate all others; and (c) static model that assumes discreteness, unity, and stability in subject matters that are intricately inter-related in contexts, and that change and "transform" continually. On these grounds I judged the inquiry cube to be inadequate for a future in which rapid change is predicted and in which reconstruction of concepts and experience will be needed.

Finally, I suggested some possible categories for a revised model, which were taken from the writings of Foucault. These categories could make the model more consistent with the goal of reconstruction by including inquiry into the conditions of emergence and the transformation of rules of existence of the subject matter under inquiry. Inquiry would then be into the logical dynamics of a subject matter rather than into a "product" viewed as existing as a stable entity (a theory, a discourse, a philosophic system).

Documentations

1. Schoenberg, Arnold, written to Karl Kraus; quoted in Wittgenstein's Vienna, Janik, Allan and Toulmin, Stephen, New York: Simon and Schuster, 1973. For a discussion of Karl Kraus and Janik's interpretation, see also Eric Heller's article in The New York Review of Books, May 3, 1973, and his exchange with Walter Kaufmann in The New York Review of Books, August 9, 1973.
2. In addition to Saunders' papers to the Far Western Philosophy of Education Society, see also his book, Double Think, with Colleen Decker, Tucson, Arizona: Farmington Press, 1973.
3. Toulmin, Stephen, The Philosophy of Science, London, 1953, p. 38.
4. Hesse, Hermann, Magister Ludi, New York: Frederick Ungar, 1949.
5. Saunders, op. cit., pp. 167-184.
6. Ibid.
7. Saunders, op. cit., pp. 17-20, the Introduction that explains the value assumptions of inquiry method.
8. Russell, Bertrand, "History of the World in Epitome (For use in Martian Infant Schools)" in The Collected Stories of Bertrand Russell, Barry Feinberg, ed., New York: Simon and Schuster, 1972.
9. For a discussion of a new approach to the problem, see Lee, H. N., Percepts, Concepts, and Theoretic Knowledge, Memphis, Tennessee: Memphis State University Press, 1973. Lee discusses Lewis' "quale" and "qualia" and poses the concept of "intuitive flux". This, however, seems no more satisfactory than the "given" or "immediate" in experience posited by other philosophers.
10. See Saunders' and Decker's paper in the 1972 Proceedings of the Far Western Philosophy of Education, J. J. Jelinek, editor.
11. For a discussion of the problems in "game" concepts, see Louch, B. R., Explanations and Human Action, Berkeley, Ca.: University of California Press, 1966, Chapter Nine: "Games and Metaphors".
12. For a discussion of the problems in "model" concepts, see, Black, Max, Models and Metaphors, Ithaca, N.Y.: Cornell University Press, 1962.

13. Russell, Bertrand, "Newly Discovered Maxims of La Rochefoucauld," in The Collected Stories of Bertrand Russell, Barry Feinberg, ed., New York: Simon and Schuster, 1972. Of these maxims, Russell said, "I cannot pretend that, at all points, I am in agreement with the epigrammatic Duke. Indeed there is only one of the ensuing maxims in which I whole heartedly and unreservedly believe. This one is the nineteenth. Some readers may feel that to accept it completely is to incur a logical paradox. To them, I can only say: remember that life is greater than logic."

14. Foucault, Michel, The Archaeology of Knowledge, New York: Pantheon Books, 1972, and Foucault, Michel, "History, Discourse, and Discontinuity," Salmagundi, #20, Summer-Fall, 1972, p. 225.

15. Foucault, "History, Discourse and Discontinuity," p. 227.

16. Kermode, Frank, "Crisis Critic," The New York Review of Books, May 17, 1973.

17. Foucault, "History, Discourse and Discontinuity," p. 228.

18. Ibid., p. 233.

19. Foucault, The Archaeology of Knowledge, p. 9.

20. Foucault, "History, Discourse and Discontinuity," p. 244.

21. These are but some of the concepts suggested by Foucault's work. I found many others to be equally as exciting and promising, suggestive of new ways of inquiring into discourse.

SECTION VIII
PHILOSOPHICAL GUIDELINES ON THE FUTURE EDUCATIONAL ADMINISTRATION

LAWRENCE L. KAVICH

This paper of reflections for future education and training will deal with philosophical guidelines for administration. Several books dealing with future outlooks and suggestions were used to initiate these guidelines. Three philosophical considerations were reviewed in the literature: (1) what is wrong now; (2) what needs to be done; and (3) how to accomplish the goals futurists have set. It is suggested that for futuristic concepts the reader refer to Umans (1:36-92) and (2:176-188); Toffler (3:398-427); Muller (4:377-383); Cohen (5:50-52 & 85); Broudy (6:223-240 & 244-251); Morphet (7:261-268); and Orlans (8:824-825 & 828-830).

What Is Wrong Today

Today's students and teachers are not treated as individuals or a personalized product. Teachers sometimes are forced to teach a set, standard course that is neither up to date nor meaningful to today's problems. Courses of study have been designed in the past and may not meet students' demands and desires. Students are forced to take programs without meaning or relevance to today's problems.

Schools have greatly broadened the variety of their course offerings, but they still are wedded to complex standardizing systems. These systems track students and make few provisions for diversity and free choice. Even with expanded course offerings, most new curriculums are in elective fields; there are few provisions to break the traditional set of required courses for graduation.

At random, schools are becoming destandardized on an experimental basis. It is not uncommon for adjustment problems to develop, and as a result there is a tendency to impose timeworn limitations and restrictions once again upon students. Without the skilled use of educational technology, there is minimal hope that new experimental projects will succeed. Schools are going to have to review proven educational research and development in technology projects to formulate and initiate destandardized school concepts.

Computers are an education spinoff from basic technology and make it easier for large schools to schedule more flexibility of classes. Computer educational data is basic to counseling all students so they will fully understand all their potential alternatives to their curriculum. Counselors must fill the gap between computer programming and personal

choices so valid selected alternate paths can be pursued.

One of the changes taking place in schools today is in the cognitive exposure of students. The student needs relevance and reality in the learning process. Courses can be reorganized to expose our contemporary society.

There is an educational revolution developing in schools and Cohen states that "if choice is limited, and knowledge is conceived of as something fixed or absolute, then any sort of social progress is marginal". (4:85) There is a need in social progress to provide education toward which many service fields of work are developing. These social fields are making different demands upon the student, and new community courses and non-school internships have to be offered.

The result of these revolutionary forces may cause a gross change in the nature of the school as an institution. Students coming out of school must be ready to step into the mainstream of the twenty-first century. There is a trend for university students to go to college without walls. Umans' "No School" school will be a virtual spider web imposed upon the environment. (1:185)

What Needs to be Done

Administration can make decisions for needed changes. Administrators can apply their expertise to field research and make decisions based on scientific fact. Marginal decision makers in leadership positions must start to update themselves in what Umans titles, "The Demise of Public Education," "Planned Change," "Education in Transition," and "A Blueprint of the Future". (1:VII-VIII) Without relevant and reliable administration, education and training will not get to the implementation stage.

Administrators need to reflect educational innovation and change and this calls for restructured budgets; curriculum flexibility and relevance; and alternative support of teachers and students by the community as an integral part of the educational system. A basic program can be obtained by participation of all persons concerned; for people can be more involved with a good system of community reporting. Communicating progress and keeping the community abreast of developments is a way of winning mass support.

Financial support is available for research and program improvement. P.L. 89-10, HEW, Higher Education Act of 1972 can assist and provide funds to improve educational programs (contact your Congressman for a copy of this current statute). Thus, when the funds are available educational administration can use industrial methods for obtaining productivity, services, and applicable austerity programs. As more national funds become available, there will be a greater demand to justify the value of a program, for it will be operating at the minimal cost.

Curriculum planning is the first step in developing contemporary educational programs. Enlistment of expertise in each curriculum field of study is needed to initiate such planning. Extensive use of computer science before, during, and after each step of planning is the second step. Diagnosing learning problems before they happen by experimentally projecting the curriculum to the student by a field test is a third basic step.

Curriculum planning needs to design the learning material to be totally applicable to the target group in such a manner they want to learn. If the students merely determine an insignificant need for this material, teachers will not be pressed to update their related expertise. Curriculum material cannot be meaningful to all students, but the material should have some relevance to all students.

Administration must keep abreast of the times and anticipate community trends. If administrators fail to provide community alternatives in their planning and design for change, they will slip back into existing situations where curriculums have been refined and reviewed and are now obsolete. Education during this century has been slow to change and presently has not kept pace with society; so this institution has once again fallen behind its responsibilities. According to Toffler:

We must create a "council of the Future" in every school and community: Teams of men and women devoted to probing the future in the interests of the present. By projecting "assumed futures," by defining coherent educational responses to them, by opening these alternatives to active public debate, such councils could have a powerful impact on education. (2:404)

Regional centers as well as "councils for the future" can provide unique national institutes for concentration of talent and facilities that will constitute a future hub of intellectual activity. Administrators should be skilled to make full use of innovative programs by involvement

and internship in new projects and programs to keep up with social impetus and to prevent for education a "Future Shock".

With all the new education and training programs that are being developed, administrators are going to increase communications and bring new and better methods of disseminating programs to the people. Multi-media services are needed to be developed and improved for teachers, students and especially the community. Educational services must be constantly improved so that in-service training is constant, current, and community related.

The contemporary education program must reach all age groups of people. The program must not stop at the end of school but be a continuous learning process that goes indefinitely. Such programs must have constant review. Representative advisory committees must be established to cover all phases of the program. Finally, computers can be vital in reviewing budget, curriculum results and alternative community educational programs.

How to Accomplish the Goals

Goals can be accomplished by three basic procedures. They are "systems approach," "PPBS" and "models". The initial way to accomplish the goals of the futurists is through systems approach. Umans defines systems approach as:

(A) results be obtained by processes that another scientist can duplicate to attain the same results; (B) all calculations, assumptions, data, and judgments be made explicit and thus subject to checking, criticism, and disagreement; (C) the scientific method be objective, its propositions not dependent on personalities, reputations, or vested interests; where possible, it should be quantitative and experimental.

In the systems approach an orderly structure is developed for the total educational program. (1:40-44) Methods of science are used throughout the total administrative program, and this makes it possible to develop or convert given procedure easily and efficiently. Planning, organizing and controlling are reciprocal parts of the system and interrelated to each other and to the program as a whole. (1:41) This method has built-in retrieval and/or evaluation and is therefore becoming easier to justify. The system approach is balanced by internal and external ideas which are

constantly considered and fed into the organization to use throughout the total program. Controls are maintained by the constant review. Systems approach enhances the administration's empirical ability to make decisions and solve problems.

Another effective administrative method to accomplish goals are used by government, industry, and higher education and found to be effective is the planning-programming-budget system (PPBS). (1:44-50) PPBS can be used by staff to design and implement a total educational program. The system relies on detailed, justified planning; listing alternatives; choosing a plan to follow; setting up validation machinery; and beginning to evaluate cost guidelines. This method provides a total fiscal or calendar year picture that can anticipate the final result.

Another method to use is contemporary educational models. This method is not often used in education because of lack of valid sources. Models have the advantage of providing adaptive administration at the observation level. Multi-models can be used to establish a new basic proposal. Most sources are highly viable and flexible and therefore more easily understood by most staff members. Early evaluation will avoid time loss and financial waste and therefore reduce total experimental costs.

According to this data, philosophical consideration of administration must function to serve the existential needs of society; contribute to development of educational self-fulfillment; and adjust to acceptable societal trends. Administrators must be able to make decisions for needed changes; this requires the use of available data processing, staff specialists, and in-depth expertise from consultants.

Educational planning, organization, and technology has become routine and status quo. Unless educational administration takes steps to update itself, the future of this discipline is in question. Computer technology and constant empirical program evaluation are needed, along with a better method of accomplishing the contemporary goals set down by society. Systems approach, PPBS and educational models are all useful administrative procedures; however, they may not be considered the answer to current futuristic demands for improved educational administration skills.

According to Muller, even Toffler, an ardent pupil of the future of the behavioral sciences, is too sophisticated to believe that the magic word is "scientific". (3:388) Perhaps, the answers to philosophical administrative guidelines are not rigorous scientific technology but rather an updating of new and developing skills which demand more administrative training and exposure to contemporary programs related to futuristic outlets.

Documentations

1. Umans, Shelly, The Management of Education. Garden City, New York: Doubleday Anchor Book, 1971.
2. _____, How To Cut The Cost of Education. N.Y.: McGraw-Hill Book Company, 1973.
3. Toffler, Alvin, Future Shock. New York: Bantam Book, July, 1970.
4. Muller, Hubert J., "Education for the Future." The American Scholar, (41:377-388), Summer, 1972, Number 3.
5. Cohen, Wilbur J., "Changing Influences in American Education." Current History, (63:49-52, 85), August, 1972, Number 372.
6. Broudy, Harry S., The Real World of the Public School. New York: Harcourt, Brace, Jovanovich, Inc., 1972.
7. Morphet, Edgar L. and Charles O. Ryan, Designing Education for the Future No. 1: Prospective Changes in Society by 1980. New York: Citation Press, 1967.
8. Orlans, Harold, "Education and Scientific Institutions." Daedalus, Toward the Year 2000: Work in Progress, (96:823-831), Summer, 1967.

SECTION IX

EDUCATIONAL PHILOSOPHY:
SOME CAUTIONARY NOTES AND QUALIFICATIONS

WILLIAM F. O'NEILL

There are various approaches to educational philosophy but, regardless of what method is used, there are certain basic qualifications that need to be attached to virtually any generalizations about the philosophical bases of educational practices. There are, of course, many of these but, for present purposes and because of obvious time and space limitations, five will be singled out for special consideration.

1. There is an important difference between belief and behavior.

An individual's conscious beliefs and his observable behavior correspond to the extent that his behavior is directed by belief and to the extent that his professions of belief are corroborated by appropriate types of behavior. In the final analysis, however, behavior verifies belief: a person is what he does and not what he says he does. This is true for three basic reasons: (a) Belief is ultimately an aspect of behavior. Behavior is a far broader category than conscious belief. Only a small part of behavior is directed by conscious awareness, let alone by explicit ideas and theories. (b) All belief is a product of behavior. Belief evolves out of behavior. At basis, our beliefs describe the meaning inherent within the experience generated by our past behavior. (c) The purpose of belief is to direct behavior. (1)

2. Not all education -- whether one is talking about specific educational practices or more generalized educational policies -- is based upon a coherent philosophy of education.

Contrary to the intellectual's traditional retort that "all practice is the practice of some theory," most practice is not based upon "theory" in the usual sense at all. Instead, most practice -- educational or otherwise -- is merely an extension of prior practice. For better or worse, most people generally practice practice and not theory, and most people behave according to habit, custom or impulse, rather than on the basis of serious intellectual convictions. This is not to deny that "man is a rational animal". On the other hand, this statement refers primarily to man's potentiality for rational action and not to his daily mode of operations. Quantitatively, very little human behavior appears to be actually motivated by ideological preconsiderations.

A central element of confusion here stems from a tendency to equate two significantly different ideas. The idea "All practice is the practice of some theory" is not true. On the other hand, the idea "All practice can be interpreted on the basis of some theory" -- that is, "All behavior can be theorized, or philosophized, about" -- is true, but it conveys an entirely different sort of meaning. The latter statement

differs from the former in one basic respect: It does not assume that "rational" behavior is necessarily "reasoned" behavior; that is, it does not hold that all behavior which can be explained in terms of abstract ideas is necessarily motivated by a conscious commitment to the realization of such ideas. It does not deny the possibility of ideological, or theory-motivated, behavior. It does, however, deny that all behavior is necessarily ideological.

Translated over to the province of educational practices, what this means can be summarized as follows: All educational practices can be subjected to intellectual analysis and construed in terms of theoretical precepts. On the other hand, not all educational practice is "theoretical" in the sense of being based upon explicit ideological presuppositions or of being motivated by conscious ideological intent.

In this regard, it is important to bear in mind that there is a significant difference between an educator who is consciously and intentionally committed to some particular "educational philosophy" and one whose educational practices are construed by others to reflect such a commitment. Interpretations on the basis of observed behavior can be notoriously misleading. The Marxist who teaches in a Catholic parochial school so that he can afford to spend his weekends writing tracts against Christianity is not a "Thomist" regardless of his superficial conformity to Catholic doctrine in the classroom. A student radical who actively promotes repressive procedures on the part of the high school principal as a tactic for fomenting a campus revolt on behalf of student rights is not an "educational conservative" despite superficial appearances to the contrary.

One point of view which causes a great deal of confusion in this general area is that which holds that, since all education is purposive, and, since all purposes are based upon philosophical assumptions about the ultimate nature of value, all education is necessarily philosophical. This position, which is actually a variation of the position already discussed, makes two fundamental errors: (a) As previously indicated, it confuses theory (the assumptions which can be analyzed out of behavior) with the internal dynamic, or psychological motive, which gives rise to such behavior in the first place. (b) It mistakenly assumes that all purposes are based upon assumptions about the abstract nature of value -- that is, it confuses the normative (behavior based upon consciously-recognized abstract ideas about value), the volitional (consciously willful behaviour) and the conative (implicitly willful behavior).

This latter point is a particularly difficult one to deal with,

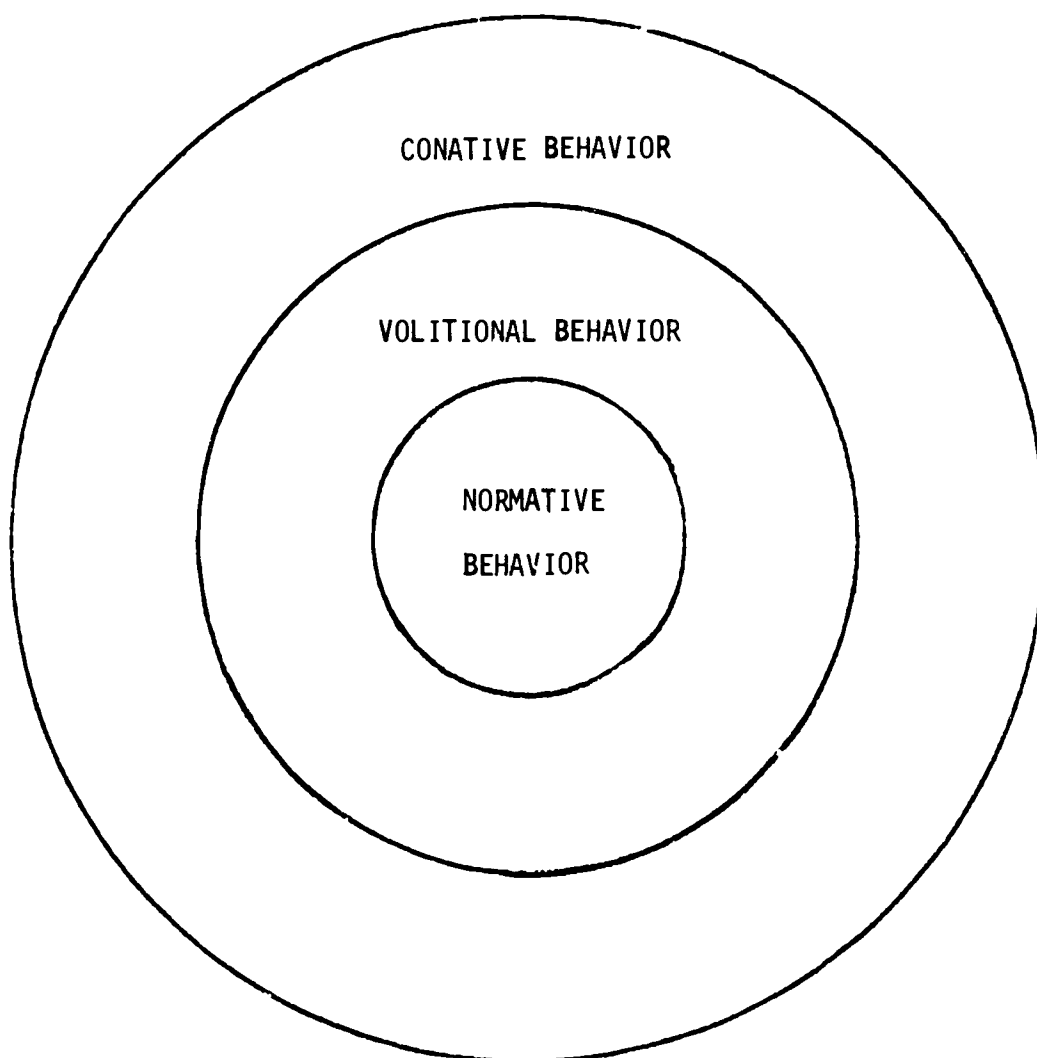
because the three terms, conative, volitional and normative, are frequently confused, although they have reference to substantially different types of action. Conative behavior is behavior which is either implicitly or explicitly purposive. The newborn infant's behavior is implicitly intentional, because he seeks the satisfaction of needs (and therefore the realization of goals) which he is not yet capable of comprehending. If and when he comes to understand the meaning implicit within his own behavior, his conative behavior becomes conscious (explicit) and therefore volitional. Volitional behavior is explicit (conscious) conative behavior in which the individual actually "has a purpose in mind". Normative behavior is behavior which is either implicitly or explicitly directed by some idea (some abstract concept or point of view) with respect to what is good or desirable. In a sense, all behavior is conative (motivated). Some conative behavior is conscious (intentional) and therefore volitional. Some volitional behavior is based on higher cognition involving abstract notions of what is good and bad and is therefore normative. From the empirical point of view, in the course of an individual's psychological development he is conative before he is volitional, and he is volitional before he is normative. Ultimately his behavior comes to reflect a combination of all three, but, in the final analysis (and as represented in Figure 1), conative behavior is the broader and more encompassing category: All normative behavior is volitional, and all volitional behavior is conative. The volitional is, in this sense, a subset of the conative, and the normative is, in turn, a subset of the volitional.

3. There is a significant difference between educational practices which are logically implied by a particular philosophical position on the one hand and the educational practices which are merely psychologically-related to (or correlated with) a particular philosophical position on the other.

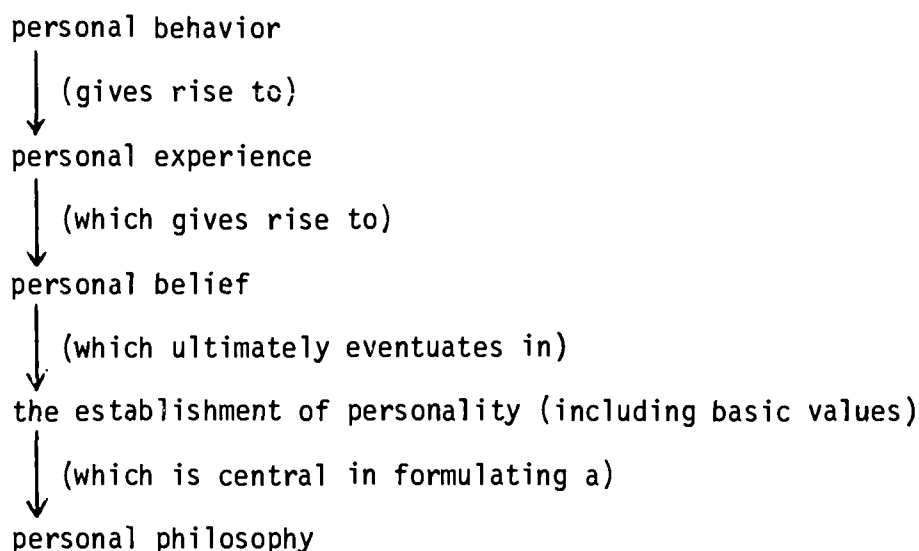
The philosophical followers of Saint Thomas Aquinas, for example, subscribe to the notion that the foremost goal of formal education is to train the student to comprehend the great religious truths which are required in order to secure the salvation of his immortal soul. This policy is a logical extension of the basic Thomistic worldview. On the other hand, most Thomists also subscribe to relatively formalized and didactic procedures in the classroom. As compared to the educational followers of existentialism and experimentalism, they are far less likely to use free inquiry techniques, activity methods, and so on. Here, however, we are dealing not so much with a practice which is a logical outgrowth of basic philosophical convictions as with one which is merely correlated (or associated) with the sort of personality-structure which is predisposed toward the Thomistic approach in the first place. This

Figure I

CONATIVE BEHAVIOR, VOLITIONAL BEHAVIOR AND
NORMATIVE BEHAVIOR



distinction is perhaps best clarified by referring to the basic worldview of empirical naturalism, which might be summarized as follows:



What this suggests can be summarized in three basic points. First, philosophical similarities are generally based upon psychological similarities which, in turn, grow out of corresponding experiences caused by undergoing (and therefore learning from) the same and similar sorts of behavior during the earliest years of life. Similar personalities seek the same and similar sorts of experience, which ultimately gives rise to the same and similar types of belief. In short, common belief is rooted in common behavior. Common belief also generates common behavior, but only on an after-the-fact basis, because belief itself is rooted in the primary pre-rational personality-structure which is established during infancy and early childhood.

Second, behavior (as previously indicated) is a broader concept than belief, and far broader than philosophical belief. Belief is merely a conscious distillation of the meaning inherent within overall behavior. Since common beliefs are grounded in common behavior, it is understandable that correspondences in behavior between individuals sharing the same or similar belief-systems will be even broader and more encompassing than their agreements in the area of mere theory. In other words, since the philosophical evolves out of the psychological, the consensus between representatives of a particular educational philosophy with respect to virtually any significant educational question will tend to be much broader than would be suggested by merely examining the behavior logically

necessitated by their common agreement in the area of theory. The consensus is fundamentally at the level of character-structure and not in the realm of a posteriori rationalization.

It is, in this regard, difficult to establish a clear-cut relationship between the so-called "educational philosophies," such as "essentialism" and "perennialism," which tend to be almost exclusively concerned with education as schooling and which are most directly related to moral and political philosophies at the middle-range of abstraction, and the various "philosophies of education," such as "educational realism," "educational pragmatism," and "educational existentialism," which have emerged deductively on the basis of inference from more fundamental (ontological) differences in the area of knowing and the known. In general, however, two considerations are worth noting: (a) Certain of the basic philosophical systems are logically incompatible with certain of the so-called "educational philosophies". A traditional theistic realist such as Saint Thomas Aquinas could not, for example, logically subscribe to an educational position like "educational libertarianism" which holds that the primary objective of education is to encourage humanistic social reforms by maximizing personal freedom within education and by advocating the extension of more humanitarian conditions within society-at-large. In a similar sense, a philosophical experimentalist like John Dewey would be guilty of gross self-contradiction if he were to endorse the highly traditional "educational rationalism" advanced by a person like Robert Maynard Hutchins or Mortimer Adler. (b) While it is very difficult to draw any convincing inferences about the ultimate philosophical assumptions underlying specifically "educational philosophies," there are, as already noted, many indirect, or psychological, relationships between those espousing certain philosophical positions and those advocating particular educational approaches. These relationships in themselves make it appear likely that persons advocating certain philosophical positions are significantly more predisposed toward certain educational practices than others. Realists in the tradition of Plato and (perhaps) Aristotle, for example, tend to be educational traditionalists because they characteristically emphasize the formal mastery of subject-matter content over the value of open-ended experimental inquiry. This is not to say that an Aristotelian is philosophically constrained to do so, however. Theoretically, he could focus almost entirely on problem-solving procedures or even veer in a highly libertarian direction. Factually, however, this is not the case. There appears to be a rather convincing psychological relationship between subscribing to philosophical realism and being predisposed toward a rather high degree of educational formalism. In a similar sense, in educational terms, most experimentalists tend to be either "liberals" or "libertarians" who are profoundly committed to the

fullest expression of political freedom, usually centering around some form of representational democracy. This commitment, however, appears to be, at best, indirectly related to experimentalism as a philosophy. It is quite possible to be an experimentalist -- as the existence of B. F. Skinner testifies -- and still have profound doubts about the wisdom of political democracy. Again, the correlation seems to be primarily rooted in a sort of meta-philosophical agreement at the level of basic character-structure which predates, and probably predisposes toward, any particular type of philosophical commitment.

Third, two factors virtually preclude any total philosophical agreement between individuals. These are, first, the fact that no person's behavior or experience can ever really be the same as any other's, and, second, that, once formulated, any system of beliefs generates behavior only in the light of particular and largely uncontrollable circumstances which, again, are never really identical for any two people. On the other hand, and despite these qualifications, personal experience does tend to be generally similar for almost everyone, and even basic differences in belief tend to fall into relatively predictable patterns because of the constancies and continuities which recur within overall human behavior as an unavoidable requirement for biological survival and for success within such survival.

4. There is no one-to-one relationship between philosophical beliefs and educational practices.

Contrary to some opinion, a number of things affect practice quite apart from theoretical assumptions, and, in general, three qualifications are necessary:

a. In most cases, an "educational philosophy" refers to the way in which some particular philosophy applies to the problems of education. The way in which any philosophy applies to schooling necessarily depends upon a variety of conditions quite apart from philosophical theory as such: the nature of the situation confronted, the physical and psychological nature of the individual responding to it (his sensory acuity, his intelligence, his temperament, his knowledgeability, et cetera), the individual's psychological response to the situation, and so on. Philosophy, as philosophy, is merely an integrated system of general ideas by means of which a person intellectually organizes his experience. Practical behavior -- in the classroom or elsewhere -- is always a compromise between the perfect and the possible, and this compromise is affected by a large number of variables quite apart from personal philosophy as such. Philosophy may affect the way a person construes his

circumstances, but it very seldom plays even the dominant role in creating the circumstances which he construes.

b. The more developed, definitive and comprehensive a philosophy is the more likely it will be to imply clearcut educational policies and practices. On the other hand, it is almost impossible to describe, explain or predict specific educational practices on the basis of a general system of philosophy like "realism" or "existentialism," because what makes such theories "general systems" in the first place is precisely the fact that they fail to make definitive statements about particular problems (as by defining particular moral policies) and that they therefore fail to develop many of the areas of intermediate theory (such as moral and political philosophy) which are central for the development of an effective philosophy of education. For this reason, the educational implications of general philosophical "systems" are probably better exemplified through the ideas of particular representatives of such systems (such as Aristotle in the area of traditional realism or John Dewey in the area of experimentalism) than by extrapolating on the basis of fundamental ontological differences at the highest level of meta-philosophical abstraction.

c. Since any generalization about the educational implications of a more basic philosophical position is necessarily tempered by the implicit qualification "other things being equal," the traditional philosophies, which assume the fundamental stability of all things (that is, that other things are generally equal, that variability and change tend to be the exception rather than the rule), tend to provide a more explicit and definitive basis for educational system-making than do the open-ended, process-oriented philosophies with their characteristic stress on relativity, subjectivity and individual differences. This is not to say that the empirical, or process, philosophies such as existentialism and experimentalism are less capable of generating effective approaches to education, but merely that the prescriptive moral and political principles associated with these positions tend to incorporate variability and change as absolutes and are therefore far less likely to absolutize the particular than are the more traditional metaphysical positions.

5. In forecasting educational behavior, knowing a person's philosophy (including his basic values) may be important, but knowing the specific priority-ranking of his values tends to be even more important. In general, four questions are of central significance:

a. What are the person's basic values? (What is his overall value-commitment?)

b. How intensely is he committed to these values? (How profound is this commitment?)

c. What, in general, is the priority-ranking of these values? (What does he care for most, and in what order?)

d. How does the individual perceive these values as relating to the situation at hand? (What is the situational relevance of his personal commitment?)

Documentation

1. Needless to say, this is in itself a philosophical position that is based upon certain presuppositions about the empirical (and, specifically, behavioral) bases of all belief. This is an involved topic which goes far beyond the requirements of the present discussion, but, in a summary form, the empirical behaviorist's point of view about the relationship between behavior and belief can be summarized in the following sequence of points:

Implicit (behavioral) meaning; organized behavior in the earliest phases of life, gives rise to



Explicit (symbolic) meaning; beliefs represented as knowledge in terms of symbols and images.



This results in behavior mediated by belief; practice directed by explicit knowledge.



This eventuates in belief mediated by belief; the internal criticism of knowledge on the basis of other knowledge: the verification of knowledge on the basis of accepted knowledge criteria (the reconstruction and correction of knowledge by means of accepted principles for knowing).



This makes possible the reconstruction and correction of behavior by means of verified knowledge, including



The correction of explicit belief-systems and



The improvement of behavior by means of verified belief



Which leads to the continued verification of beliefs, and so on.

In even more cursory summarization it might be represented in the following manner:

Behaving gives rise to



believing, which gives rise to



thinking (the application of belief to behavior), which eventuates in



theorizing (the application of belief to belief)



which alters behavior, therefore modifying beliefs, altering thought-processes and giving rise to new reality-concepts (theories).

SECTION X
ANALYTIC RESPONSIBILITY:
OURS OR THEIRS

ROBERT JOSEPH ROSSI

The analytic frontiers of education seem to be wide open for the future. In fact, as philosophers of education we need only examine the various activities of the researcher, test theorist, curriculum developer and others to realize that the future was never so bright. Only our reluctance to set out in some of these areas for fear of weakening existing ties with philosophy or of becoming too concerned with practical matters stands in the way.

I shall not argue in this paper that we, as philosophers of education, should let it be known to researchers and test theorists that from now on we intend to clarify their concepts. On the contrary, it is my belief that for too long we have overlooked many of the discussions in these areas while trying to pin down the issue of whether or not ours is a discipline. And while it is a relief for us to note that many of these "non-philosophers" have carried out their analyses in a philosophical manner, we should realize that many (if not most) of the issues with which they have been concerned are philosophical. This is the point I want to emphasize here. When we look to the future as educational philosophers we should see ourselves not as missionaries sent to help clear the muddle left by those less trained in analytic skills, but as prodigals ready to assume our own responsibility.

Both in seminars and discussions with philosophers of education I have heard it said either that "so-and-so is really doing philosophy when he considers the validating of tests" or "so-and-so considers himself a philosopher of science when he evaluates the usefulness of experimental designs". Lest I fail to capture the sense of surprise usually accompanying such statements, let me make clear that in each case the "so-and-so" referred to is not officially a "philosopher" of education but rather a test theorist or researcher. The significance of these remarks for my argument lies precisely in this sense of surprise for it seems to involve an error in perspective. Should we be surprised that "so-and-so is doing philosophy" when the questions at issue concern, for example, test validation, analysis, interpretation, or, the design, informational analysis, or statistical analysis of educational experiments? Is it unusual for an individual considering these sorts of questions to consider himself a "philosopher"? On the contrary, it seems to me we neither should be surprised nor find it odd that the examination of philosophical issues requires one to "do philosophy" or take on the perspective of the philosopher. Indeed, if "so-and-so considers himself a philosopher of science" we should be surprised only if he confronts questions more properly within the domain of the philosopher of language.

Since I am most interested in the relation of philosophy to

educational research and testing, I am concentrating on the philosophical issues in these areas. My eventual aim is to outline three types of analysis which should be quite helpful to the philosopher of education in considering these sorts of issues. But first, to avoid any misunderstanding, let me say more about the philosophical status of matters relating to the design of experiments and the theory of testing. These are meant to be examples of the sorts of philosophical questions in these and many other areas of education which demand philosophical examination.

Designing experiments involves the making of many decisions. What exactly is the phenomenon to be studied and what aspects of this phenomenon are important? If these questions are not precisely stated, the harder is the choice of what design structure to employ (e.g. pre-post with control group vs. factorial) and what design elements (e.g. orthogonal contrasts vs. factor levels) to include. And when such structures and elements are employed, how can they be used so that we obtain the maximum amount of information. Here we might ask what sort of information, that is, what interpretation of "information" we are using to guide our maximization procedures. This is a philosophical question.

Cronbach's multifacet approach to studying the design of an experiment (1) provides an operational approach to some of these concerns and additionally involves the matter of generalizability, itself distinct from but not exclusive of the problems of inductive generalization. Lastly, the choice of a statistical model involves many considerations. What assumptions must one make about the data, how can one balance concern for choosing maximally likely hypotheses against the need to develop substantive generalization, what will be considered as a significant result from both the statistical and practical standpoint and what role will the model play in one's overall reasoning process. These decisions involve very basic philosophical concepts and issues in both the philosophy of science and logic.

Test theory presupposes even more directly an understanding of many concepts and issues in the philosophy of science and how the philosopher goes about examining these matters. The validation of a test requires the consideration of many different hypotheses and various types of evidence. One is not merely involved in the analysis of the test structure itself but in the various interpretations that make it meaningful to prospective users. These concerns naturally lead to validation of the underlying construct and the "traditional" philosophical discussion of whether some sort of operationalism as opposed to reliance on a network of generalizations is necessary for empirically studying the construct.

The role of "information" as a means of interpreting much of the rationale of test theory is quite interesting. It is this choice of an underlying interpretation that most clearly reflects much of the concern over reliability or generalizability and validity. I mention this because the choice of an underlying interpretation of "information" (e.g. that of Shannon and Weaver (2) or that of Bar-Hillel and Carnap (3) must reflect clearly one's native intuitions about testing as well as the matters referred to above. This choice is basically a philosophical question. Again, I think it is quite clear that these questions, oftentimes considered to be the exclusive concern of the test theorist, by philosophers of education as well as test theorists themselves, are basic to philosophy and require philosophical attention.

These examples are overly abbreviated but I hope sufficient to make clear my point. The philosopher of education cannot in the future regard his position as merely a part-time consultant "bringing the word" to the test theorist or researcher on the clarification of concepts and issues peculiar to these fields. Since very many of these concepts and issues are philosophical, it is the philosopher's responsibility to examine them. Here let me briefly describe three types of analysis with which the philosopher of education may undertake this examination. I do not mean to imply by presenting them separately that these three types of analysis are or should be distinguished always in practice. My aim is merely to explicate a program of analysis.

Conceptual Analysis

The analysis of concepts is discussed in many classic works in linguistic philosophy and education. It is useful however to briefly review three of the principal trends of this sort of analytic procedure. Wittgenstein (4) described the "basic" approach which consists of delimiting the context (language-game) surrounding the use of a term, consideration of the word's uses in this context, and its relation to other, similarly used terms. Austin (5 & 6) chose to concentrate mainly on the use of a term in ordinary discourse. His position was that many if not all of the problems of philosophy were due to confusion over the use of words. He also noted the distinction between performative and exercitive utterances (i.e. illocutionary acts) which marks the third trend and provided the impetus for Searle's essay on speech acts (7).

These three aspects of conceptual analysis provide the philosopher

with various approaches to conceptual confusion. They are particularly helpful in locating hidden assumptions, understanding how words are used and what they mean in different contexts. As I mentioned above, the efficient design of educational experiments and test schedules minimally demands the precise statement of aims. Without conceptual clarity, even the most competent statistician or test maker will have difficulty deciding what was significant or what was measured. Conceptual analysis can and usually does provide the basis for the following two types of analysis I want to consider, logical and methodological.

Logical Analysis

The analysis of logical structure is concerned with the consistency of claims as well as their coherence in particular arguments or theories. The role statistical models play in the researcher's reasoning process is one topic which may be considered in an examination of the coherence of an educational experiment. Other more theoretical models, used as analogies to pin a particular experiment, experimental design, test, or sequence of tests to a particular interpretation may be logically examined. The coherence of the proposed analogue and its consistency with regard to the particular experiment or test may be analyzed.

Logical analysis also can evaluate the requirements for generalization as well as examine proposed measurement and classification schemes. The former aspect may include an examination of the different factors playing a role in singular inductive inference as opposed to inductive generalization. The latter may involve a consideration of the relation of ordering or structuring relations and the proposed system of data classification. This latter analysis strictly deals with logical and not empirical matters (e.g. reliability).

Methodological Analysis

Methodological analysis is no less often referred to in both philosophical and educational texts than conceptual analysis but it seems open to a wider range of interpretation. Briefly, methodological analysis evaluates the relation of ideal or heuristic constructs to the real world.

These constructs may be either theoretical or statistical models and the examination of their relation to the data necessitates a concern for the empirical significance of statements and for the evaluation of the requirements for generalization (i.e. generalizability). An example of the distinction between logical and methodological analysis can be seen with regard to the limits of their respective examinations of heuristic or theoretical constructs. In logical analysis we are concerned primarily with the "absolute" coherence of a particular analogue and its consistency with respect to a particular test. But when we are concerned for the relation of the analogue to the world much more is at stake. It is no longer sufficient that the analogue be consistent with the test. Now it must also account for the sort of data the test provides.

Another way to characterize methodological analysis is to refer to it as a clarification of the limits of method where "method" refers to the sort of model proposed and these "limits" are fixed by examining both conceptual and empirical matters. This characterization nicely serves to emphasize those aspects of methodology which may be considered in regard to different varieties of information where "information" is taken in its semantic sense (8). While methodological analysis, no matter which characterization is used, may require the philosopher's familiarity with some of the data gathering and statistical procedures used by the researcher or test maker, it more importantly demands the skills of the philosopher qua philosopher.

These three types of analysis are probably very familiar to many philosophers of education. They are certainly not new to most. The point I have been stressing is that carrying out this sort of analytic program in the areas of research and test theory is not so much helpful to these fields as it is necessary to our own. I have argued that many of the matters of concern to workers in these areas of education are basically philosophical ones and must be of concern to the philosopher as well. We cannot see the future as a time for philosophers to help others out of their conceptual, logical, or methodological confusion. We must realize that much of this confusion surrounds basic philosophical questions and that examination of these issues is not only the prerogative of the philosopher it is his responsibility.

Documentations

1. Lee J. Cronbach, Goldine C. Gleser, Harinder Nanda, and Nageswari Rajaratnam, The Dependability of Behavioral Measurements: Theory of Generalizability for Scores and Profiles. (New York: John Wiley & Sons, 1972), See especially Chapter One for an introduction of this notion.
2. Claude E. Shannon and Warren Weaver, The Mathematical Theory of Communication. (Urbana, Ill.: University of Ill. Press, 1949).
3. Y. Bar-Hillel and R. Carnap, An Outline of a Theory of Semantic Information. (M.I.T.: Technical Report No. 247, Research Laboratory of Electronics, 1952).
4. Ludwig Wittgenstein, Philosophical Investigations, (New York: Macmillan & Co., 1953).
5. J. L. Austin, "Other Minds," Proceedings of the Aristotelian Society, Supplementary Vol. (1964).
6. J. L. Austin, How to Do Things with Words. (London: Oxford Univ. Press, 1962).
7. John R. Searle, Speech Acts: An Essay in the Philosophy of Language. (London: Cambridge Univ. Press, 1969).
8. Jaakko Hintikka, "The Varieties of Information and Scientific Explanation," in B. Van Rootselaar and J. F. Staal, eds., Logic, Methodology, and Philosophy of Science: Proceedings of the 3rd International Congress for Logic, Methodology, and Philosophy of Science. (Amsterdam: North-Holland Pub. Co., 1967).

SECTION XI

BEHAVIORISTIC ECLECTICISM:
A DELETERIOUS ANTITHESIS TO EDUCATIONAL PHILOSOPHY

MORRIS L. BIGGE

In 1938, Boyd H. Bode wrote, "The fact that the progressive movement has never come across with an adequate philosophy of education warrants the presumption that it does not have any." (1) Were Professor Bode living today, I am quite sure that he would be expressing a similar reaction to the behavioristic eclecticism that supports the mechanistic instructional technology that is associated with behavior modification and performance- or competency-based education. By behavioristic eclecticism we mean a loosely defined behaviorism that claims to be comprehensively eclectic, but which shows very little influence of either Gestalt or cognitive-field psychology.

Under the banner of performance- or competency-based education and teacher education, many educators are overly zealous and industrious in promoting a rigidly mechanistic system of education while giving little thought to what it is that they really are trying to do. There are many evidences of this condition.

"Experts" promoting competency-based teacher education set their plans over against those of "conventional education" seeming not to realize that their own plans are sharply reminiscent of the specific objectivism of the 1920's. In conferences set up for promotion of competency-based teacher education consultants concentrate upon dogmatically presenting their ideas. When they are asked, "just what is it you are trying to accomplish for individuals and for society," they make light of such questions. They then allude to professors who oppose competency-based teacher education for reasons such as that it eliminates their opportunities "to tell their old stories to their classes". (2) In this manner significant questions are shrugged off with reckless abandon, and audiences are urged to get along with the business at hand.

Adherents of competency-based education tend to use the expressions "competency-based education" and "performance-based education" interchangeably. When the few listeners who have not become completely submerged meekly point out that the two expressions have quite different connotations, they are told that such matters are inconsequential.

Characteristically, school staffs draw up their lists of behavioral objectives in disciplinary and apperceptive as well as behavioristic terms, all mixed in together, and they in no way indicate that each type of objective carries definite implications for the type of teaching-learning situations that should prevail.

"Experts" on behavior modification often defend the listing of specific teaching goals and objectives and then testing for their

achievement on the grounds that it will make poor teachers toe the mark as well as make poor students learn at least something. In so doing they employ a paradigm for all teaching that has been developed in relation to poor teachers and poor students in an attempt to force poor teachers to do at least a mediocre job of teaching. Meanwhile, paradigms that might be derived from the teaching procedures of excellent teachers are either ignored or overlooked.

Now, what are the ideological sources of the jumbled thinking that underpins much of this "modern" movement toward reactionary education? Granted that the greatest impetus has come from accountability and testing experts, there still is to be recognized some line of ideological development that has been enlisted to add respectability to the movement. I now state my basic hypothesis, which is yet to be adequately tested.

Through the great influence of B. F. Skinner, accompanied by a lack of psychological and philosophical sophistication on the part of many school personnel, schools of education as well as public schools have come to be dominated by a very loosely defined behaviorism that is much less defensible than is Skinner's own "radical behaviorism". Whereas Skinner, philosophically, implies near "logical empiricism," the prevailing psychological thinking among school personnel tends to reflect little other than "naive realism". Since representatives of this naive realism give only minor attention to personal and social criticism and reform, their main thrust is to perpetuate the conservative status quo.

I am all for futuristics in educational philosophy, but for futuristic thinking to be effectual it must be accompanied by a recognition of what systematic thinking is currently up against. One of the greatest ideological culprits in today's scene, in my opinion, is the dominance of non-theoretical educational theories in the form of non-philosophical educational philosophies and non-psychological educational psychologies. The main stream of non-theoretical theory seems to be spearheaded by mild perversions of the ideas of three well-known scholars. It consists of a mosaic, but in no sense a synthesis, of the ideas of Jean Piaget, Benjamin S. Bloom, and Robert M. Gagné. It is not so much the respective ideas of the three men that are at fault, but more the syndrome that has been constructed by methodologists' using the ideas developed by the three.

Piaget describes his saltatory developmental stages in terms of cognitive intellectual growth. It is doubtful that Bloom took his cues for his taxonomies of objectives from Piaget's works. Nevertheless, contemporary behavioristic eclectics do use Piaget's "stages" to lead into their psycho-motor, cognitive, and affective taxonomies. Then, Gagné's

eight "conditions of learning" are brought on the scene to implement the achievement of the stated objectives and thereby provide the basis for a behavioristic, eclectic methodology.

Champions of this behavioristic, eclectic line of thought, with the best of intent, comprise an anathema to systematic educational philosophy in that they confuse teachers to the point that they cannot develop any defensible systematic approach to their work. They smuggle in their categories of thought, which of necessity are based upon theoretical systems, on the backs of their claims that both their outlooks and their procedures are non-theoretical and eclectic. Consequently, their product is some sort of "shotgun" mish-mash of methodological ideas that are irreducible to any kind of systematic educational thought.

The verification of my stated hypothesis rests first upon an analysis of the ideas of each of the three scholars, then secondly upon an appraisal of prevailing mosaics of these ideas. Accordingly, as a first step, the remaining section of this paper is devoted to an analysis of the psychological works of Gagné as they relate to educational philosophy, curriculum, and methodology. This study could well be followed by appraisals of the ideas of Piaget and Bloom as they too relate to problems of educational philosophy, psychology, curriculum, and methodology. These studies then could be followed by a careful analysis of how ideas of the three scholars are being employed in substantiating current methodological and curriculum procedures.

For Gagné, learning is an event that happens under certain observable conditions. Specifically, it "is a change in human disposition or capability, which can be retained, and which is not simply ascribable to the process of growth". (3) It exhibits itself as a change in observable behavior. An inference of learning's having occurred is made by comparing what behavior was possible before the individual was placed in a learning situation and what behavior can be exhibited after such treatment. The learning may be an increased capability for some type of performance. But, it also may be an altered disposition of the sort called "attitude," "interest," or "value".

So, we might conclude that the essence of learning, for Gagné, is the development of a capability for change in performance. But, for us to do so would be in error. Gagné also equates the performance change itself with learning. His book describes, "eight distinguishable classes of performance change (learning) and the corresponding sets of conditions for learning that are associated with them". (4)

Performance changes are changes in responses described in terms of their effect rather than in terms of their appearances. For example, Gagné would describe a given performance in terms of "scratching the head" instead of "moving the fingers rhythmically over a small area of the scalp". (5) Each of the eight classes of performance change or learning has its respective set of "conditions of learning". To identify the classes or varieties of learning, we must look first at the capabilities internal to the learner, and second at the stimulus situation outside the learner. The "conditions of learning" are the various "sets of circumstances that obtain when learning occurs". (6)

The most important aspects of a learner, according to Gagné, are his senses, his central nervous system, and his muscles. The learner's glands, motives, goals, intentions, and expectations, and his insights in regard to them, apparently are of little importance. Any learning capabilities that can be transferred must be stored in the learner's nervous system. Hence, all initial capabilities possessed by a learner must be conditions internal to him. Then, just as factors that influence growth are to a very large extent genetically determined, factors that influence learning are chiefly determined by events in an individual's environment.

Gagné defines insight extremely narrowly and inadequately, then refutes the value of the concept. For him an insight not only can be sudden, it must be so. Furthermore, he assumes that the concept insight implies that one's learning is in no way affected by his prior learnings. He then lists some learnings that cannot be acquired insightfully. Every one of his illustrations in this regard would be challenged by any contemporary cognitive-field theorist. For example, he states that a person cannot learn to read by developing insight. A cognitive-field theorist would insist that not only can one learn to read through development of insight, but that any genuine reading is an insightful process. Having destroyed the value of the concept insight to his satisfaction, Gagné discards it until late in his book when he casually brings it back in to help describe the process of problem solving. (7)

Having destroyed any adequate meaning of insight, Gagné proceeds to depreciate the use of such verbs as know, understand, and appreciate in statements of educational objectives. In their place he lauds the use of overt action verbs such as state, derive, and identify. He then disdainfully characterizes the use of the first group in statements of objectives as "ambiguous" and the use of the second group as involving "true" definitions of objectives. (8)

Gagné thinks of himself as a naturalistic observer, not a theorizer, of learning. He states, "an observer of learning must deal with an input, an output, and a functioning entity in between. The input is a stimulus situation(s), which includes the varieties of changes in physical energy that reach the learner through his senses. . . . The stimulus situation is in general (except for the special instance of stimulation from the muscle sense) outside the learner and can be identified and described in the terms of physical science.

"The output, R, is also in a real sense outside the learner. . . . The output may be something like a 'wave of the hand,' but strictly speaking, it is not the muscular movements that underlie this event. Rather, it is the external, observable effects of these movements." (9)

The input stimulus situation and the output response are directly observable variables. "The nature of the connection between an S and an R cannot be directly observed." (10) As he sees it, Gagne's task is to describe what the requirements must be in order for an observed transformation between an S and an R to occur, without constructing any theory in this regard. So, he simply "describes" what the various theories of learning attempt to "explain".

Gagné observes that when each student enters school he already has a large repertoire of well-practiced stimulus-response connections. The learning of different desired capabilities requires both different prior capabilities or prerequisite skills and different external conditions. The two kinds of prevailing conditions -- those internal to the learner and those external to the learner -- are independent in their action. (11)

Gagné emphasizes the role of instrumental conditioning and depreciates the importance of classical conditioning. However, for him, instrumental conditioning, as it occurs in school, is largely a matter of information processing, which takes place in a learner's central nervous system. "Learning as a total process begins with a phase of apprehending the stimulus situation, proceeds to the stage of acquisition, then to storage, and finally to retrieval." (12) The apprehending phase of learning consists of the subject's attending, perceiving, and coding (making something of) a stimulus. The purpose of psychology is to observe conditions under which learning occurs, and to describe them in objective terms.

Here we see Gagné using the terms apprehending and coding and employing them in such a way as to imply purposive interaction of persons in relation to their psychological environments, but at the same time

emphasizing that human learning should be described in "objective" terms.

Gagné recognizes that there are some psychological problems of great importance to education that cannot be solved by applying a knowledge of his "conditions of learning". "For example, there are many aspects of the personal interaction between a teacher and his students that do not pertain, in a strict sense, to the acquisition of skills and knowledges that typically form the content of a curriculum. These varieties of interaction include those of motivating, persuading, and the establishment of attitudes and values. The development of such human dispositions as these is of tremendous importance to education as a system of modern society. In the most comprehensive sense of the word 'learning,' motivations and attitudes must surely be considered to be learned. But the present treatment does not attempt to deal with such learnings, except in a tangential sense. Its scope is restricted to what may be termed the intellectual, or subject matter content that leads to improvement in human performances having ultimate usefulness in the pursuit of the individual's vocation or profession." (13)

So, Gagné delimits out of the psychology of learning the most important aspects of a significant education that will enable a student to live a responsible life in a democratic society, and in so doing he provides rules for development of a narrow vocationalism within our instructional processes. He further recognizes that his methods do not provide a means for specifying the learning conditions necessary to attain the highest and most complex varieties of human performance such as displayed in invention or aesthetic creativity. The most that he can say in this regard is that, "the production of genius is not based on 'tricks,' but on the learning of a great variety of specific capabilities". (14) Here we again see him delimiting out of formal education the very factors or influences that might point toward promotion of student creativity.

Gagné's eight learning types are (a) signal learning, (b) stimulus-response learning, (c) chaining, (d) verbal association, (e) discrimination learning, (f) concept learning, (g) rule learning, and (h) problem solving. He states that his describing eight varieties of learning implies, "that there are eight corresponding kinds of changes in the nervous system which need to be identified and ultimately accounted for". (15) However, from outside the organism each variety seems clearly distinguishable from the others in terms of the conditions that must prevail for each to occur. Each variety of learning begins with a different state of the organism and ends with a different capability for performance. "The most important class of conditions that distinguishes one form of learning from another is the initial state of the learning --

in other words, its prerequisites." (16) In general, types 3 and 4 require types 1 and 2 as prerequisites; type 5 requires types 2, 3, and 4; type 6 requires type 5; type 7 requires type 6; and type 8 requires type 7. In this way all eight kinds of learning are reducible to mechanistic S-R associationist or conditioning processes.

Gagné perpetuates a reductionistic tradition, which extends back to the 19th century and beyond. Learning types 1 and 2, classical conditioning and instrumental conditioning, "have genuine identities; they can be made to happen at will". (17) They are the building blocks for his entire system and they constitute the links of which the more complicated types of learning are comprised.

Whereas Professor Skinner emphasizes the shaping of behavior through development of desired responses, Gagné stresses the organism's selection of stimuli. His basic paradigm is $S_s \rightarrow R$. (S) represents the external stimulus, (s) represents the accompanying internal proprioceptive stimulation, and (R) represents the external response. Understanding learning is a matter of figuring out the different ways in which stimuli are processed by the central nervous system.

Behavioristic chaining may be either motor (type 3) or verbal association (type 4). "By chaining is meant the connection of a set of individual $S_s \rightarrow R$'s in a sequence." (18) Gagné emphasizes that, "the chain as a chain cannot be learned unless the individual is capable of performing the individual [$S_s \rightarrow R$] links". (19)

Gagné notes that repetition of a sequence tends to "smooth out" the rough spots. He also states that, "The occurrence of some terminal satisfaction appears to be essential to the establishment of chains". (20) But, he does little to develop the psychological significance of either observation. In his treatment of verbal chaining, he does summarize some of Ausubel's ideas in regard to cognitive learning, but he does little to incorporate these ideas into his "conditions of learning".

Discrimination learning (type 5) is the process within which sets of connections or chains of learning become increasingly differentiated in the sense that individual stimuli and responses become more readily distinguishable from one another; the individual becomes capable of making different responses to stimuli that are somewhat alike, but still different.

Gagné observes that, "most instruction in school subjects is concerned with the learning and use of concepts [type 6] and rules [type 7] and with problem solving [type 8]". (21) For him, concept learning is

one's making a common response to a class of stimuli; "the learner becomes able to respond in a single way to a collection of objects as a class, which then extends beyond the particular members that were originally present". (22) So, concept learning depends upon discrimination learning, which in turn depends upon verbal chaining, which is based on signal learning and S-R conditioning processes.

For Gagné, rule learning (type 7) is forming a chain of two or more concepts in the form of a built-in type of behavior that occurs in response to a class of stimulus situations. A rule, "must be an internal state of the individual, which governs his behavior". (23) It is, "an inferred capability that enables the individual to respond to a class of stimulus situations with a class of performances . . ." (24)

A rule may be stated verbally, but the rule itself is an inferred capability. To have a student learn the rule that "round things roll," "he must be asked to exhibit terminal responses that are possible only if he can, in fact put together the concepts round and roll. Knowing the rule means being able to demonstrate that round things roll, not simply to say the words". (25) "While various kinds of verbal information ('facts,' 'propositions,' 'generalizations') play an important role in the learning of new intellectual skills, they do not represent a stable basis for describing what the individual 'takes away with him' from his education. Intellectual skills, on the contrary, do tend to remain with the individual over long periods of time . . ." (26)

Here we see an example of the psychological underpinning of the curricular dichotomy that is emphasized by adherents of performance-based education. They set teaching for behaviors over against teaching for knowledge in such a way as to imply that knowledge consists of mere verbalizations. The idea that knowledge is better defined as an expectancy or understanding that may be expressed in words, but need not be, apparently escapes them.

Gagné's rule learning is an apperceptive process expressed in behavioral terms. Hence, it well could be called "physicalistic apperception". His behavioristic steps of the instructional sequence for teaching a rule have much in common with the five mentalistic steps in apperception as advocated by Charles A. McMurry and others in the early 1900's. However, the steps are given in a slightly different order. (27)

Gagné's problem solving (type 8) consists of the use of the "discovery method". "Problem solving occurs when the instructions provided the learner do not include a verbally stated 'solution' but require him to

construct such a solution 'on his own'." (28) In problem solving, "the learner discovers a combination of previously learned rules that he can apply to achieve a solution for a novel problem situation". (29) In this process, he combines two or more previously acquired rules to produce a new capability in the form of a higher order rule. Extremely higher-order rules are learning strategies; they pertain to the behavior of the learner, regardless of what he is studying. So, "Rules are the stuff of thinking". (30)

An individual's being able to think means basically "that he is able to combine the rules he has already learned into a great variety of novel higher-order rules. He may do this by stimulating himself and also by responding to various forms of stimulation from his environment. By means of the process of combining old rules into new ones, he solves problems that are new to him and thus acquires a still greater store of new capabilities". (31) Accordingly, a student is given a problem. Its solution consists of his supplying the steps in thinking that will achieve its answer.

Gagné uses the concept learning hierarchies to describe the internal conditions of learning. These hierarchies take the form of capabilities that are to be learned and other capabilities that are prerequisite to these. Each hierarchy identifies a set of intellectual skills in the order of their being subordinate to one another. Gagné states that a teacher in dealing with students should "make sure that relevant lower-order skills are mastered before the learning of the related higher-order skill is undertaken . . . first, find out what the student already knows; second, begin instruction at that point". (32) "The individual learns simpler things first, then more and more complex things . . ." (33)

Instructing means arranging the proper conditions of learning that are external to the learner. These proper external conditions include communicating verbally with the student to inform him of what he is to achieve, reminding him of what he already knows, directing his attention and actions, and guiding his thinking along certain lines. These external events called instruction need to have different characteristics, depending on the particular class of performance change that is desired. (34)

Gagné recognizes a place, but not an important one, for class group discussions. He sees the purpose of group discussion as being to make public explorations of new ideas, analogies, and similarities and differences among various branches of knowledge. But, he states, "the

class discussion is not primarily concerned with learning at all, but with the transfer (generalizing) of what has already been learned . . ." "To get learning to happen is still the basic problem. The conditions that bring learning about are not those of the discussion class." (35)

Throughout my paper I have interspersed brief comments in regard to my appraisal of Gagné's psychology as it has implications for systematic educational philosophy. I will close with mentioning what, to me, is a crucial hiatus in this scholar's treatment of learning and teaching.

Professor Gagné omits from his Conditions of Learning any psychological basis for reflective teaching and learning that is aimed toward helping students gain significant understandings in an exploratory fashion. In fact, such teaching and learning seems to elude his life spaces. By reflective teaching and learning we mean, as stated by John Dewey, "active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends . . ." (36)

Reflection-level learning leads to formulation of generalizations. But generalizations, so gained, are not products of mere cumulative processes as are Gagné's high-order rules -- his products of "problem solving". Furthermore, whereas reflective teaching and learning, in their most effectual sense, consist of student-teacher cooperative problem development and problem solution, Gagné states repeatedly that instructors can and should give students problems. A so-called "problem" that is given to a student is more a task than a problem. Lastly, for anyone who is committed to reflective teaching, class discussions can, do, and should be the scene of student learning proceeding in an excellent and most effectual fashion. But, for Gagné, class discussions are not learning situations at all.

Documentations

1. Boyd H. Bode, Progressive Education at the Crossroads (New York: Newson and Company, 1938), p. 84.
2. Regional Invitational Conference on Performance Based Teacher Education, San Diego, California, May 14, 15, 1973.
3. Robert M. Gagné, The Conditions of Learning, 2nd ed. (New York: Holt, Rinehart and Winston, Inc., 1970), p. 3.

4. Ibid., p. V.
5. Ibid., p. 5.
6. Ibid., p. 3.
7. Ibid., p. 228.
8. Ibid., p. 326.
9. Ibid., p. 34.
10. Ibid., p. 34.
11. Ibid., p. 23.
12. Ibid., p. 78.
13. Ibid., p. 25.
14. Ibid., p. 26.
15. Ibid., p. 62.
16. Ibid., p. 65.
17. Ibid., p. 121.
18. Ibid., p. 123.
19. Ibid., p. 125.
20. Ibid., p. 131.
21. Ibid., p. 67.
22. Ibid., p. 156.
23. Ibid., p. 191.
24. Ibid., p. 191.
25. Ibid., p. 197.

26. Ibid., p. 245.
27. Ibid., p. 203.
28. Ibid., pp. 226-227.
29. Ibid., p. 214.
30. Ibid., p. 216.
31. Ibid., p. 59.
32. Ibid., pp. 240-241.
33. Ibid., p. 246.
34. Ibid., p. 29.
35. Ibid., p. 374.
36. John Dewey, How We Think (Boston: D. C. Heath, 1933),
p. 9.

SECTION XII

TAXONOMIZING EDUCATIONAL OBJECTIVES:
SOME QUESTIONS ABOUT THE APPROACH OF BENJAMIN BLOOM AND ASSOCIATES

MAURICE P. HUNT

Although attempts to achieve "accountability" have taken authoritarian and mechanistic forms that are now much a subject of debate among philosophers of education, I find little of this debate addressed to the validity of the familiar division of behavioral objectives into "cognitive," "affective," and "psychomotor". It may be that this division, introduced in the taxonomy of Benjamin Bloom and various of his associates, in large part sets the tone for the educational technology which so many of us object to as a means of implementing the understandable desire of public and politicians that teachers be able to demonstrate results for their efforts.

This paper is a limited attempt to get at Bloom's philosophy of education and its related psychology. I have had time only to study -- somewhat superficially I am afraid -- what I consider Bloom's key book in revealing his general outlook, and the three paperback volumes of wide circulation, on the taxonomies of cognitive, affective, and psychomotor objectives (see bibliography). My analysis here should be considered as incomplete and highly tentative: a working hypothesis which I hope later to develop and evaluate more fully.

In the preface of Bloom's Stability and Change in Human Characteristics, I find two items which, if Bloom followed them consistently would, I think, pretty well place him philosophically. He says, "It is to be hoped that the development of theory and method in the behavioral sciences will in the near future permit us to use the mathematical, graphic, and propositional forms of statements which can now be used in the physical sciences". (p. viii).

On the previous page, Bloom says that this book's point of view can be summarized in one mathematical equation, as follows:

$$I_2 = I_1 + f(E_2 - I_1)$$

"I" refers to quantitative measures of a characteristic of an organism at two points in time; "E" refers to the relevant environmental characteristics during the intervening period. Although Bloom's explanation of this equation is very thin, I take it (perhaps mistakenly) that he is saying in effect that the second measurement of a characteristic reflects with near precision the change in relevant environmental influences which have occurred between the first and second measurements of that characteristic.

As I interpret it, Bloom's assertion of the desirability of modeling psychology after the image of physics stems from early behaviorism and was popularized as a goal of psychology by such nineteenth- and early

twentieth-century figures as Pavlov, Thorndike, and Watson; and is still a goal of behaviorists generally who assert that otherwise psychology has no claim to scientific status. Again as I interpret it, the above equation is an assertion of pure environmental determinism, on the order of that promoted by many behaviorists, and currently pushed most vigorously by B. F. Skinner. If this were all there were to Bloom's position, we could probably safely infer that he assumes the basic validity of philosophical positivism, and using today's terminology, could be labeled a logical empiricist. This interpretation can be bolstered, it seems at first glance, by Bloom's apparent total confidence in "objective" testing as a means of discovering all that it is useful to know about human beings (p. 5).

But as one reads on, the initial interpretation that Bloom has a systematic view, which could be defended on the basis of either internal consistency or systematic behavioral research begins to fade. First, Bloom claims an indebtedness in his studies of human development to Freud and from time to time uses Freudian terminology, particularly the concepts of "conscious" and "unconscious". I am aware that some psychologists have tried to develop a synthesis of Freudian and behaviorist psychology, and if this can be done, Bloom is still in passible if not the best possible company. But then he also claims indebtedness to Erich Erickson and Karen Horney -- both influenced by Freud but to me both breaking from original Freudian doctrine in rather fundamental ways.

It is when Bloom expresses indebtedness to Erich Fromm, who, to me is rather clearly within a framework which might properly be labeled existentialist humanism, that doubts about Bloom's consistency become rather overpowering. Then, when I find in his list of key references (pp. 231-33) such names as Abraham Maslow, Jean Piaget, Carl Rogers, and Harry Stack Sullivan, and his use (p. 228) of Maslow's self-actualization concept and Rogers' self-realization principle, it seems that such doubts are confirmed.

From time to time Bloom refers to behavior as a function of the interaction between an organism and its environment -- an assertion which to me is inconsistent with the "iron law of determinism" with which Bloom begins this book. Since Bloom never defines interaction, however, we can not tell whether he has in mind a passive interactionism consistent with behaviorism, or an active interactionism consistent with field psychology. After reading the admittedly small proportion of Bloom's writing that I have, I seriously question whether he understands this issue.

Bloom further violates what seems to be his own stated position

when he asserts that what human beings are grows from some combination of genetic and environmental demands; on p. 213, he talks of "genetic-environment" interaction. He is back to determinism again, but now it is a combination of biological and environmental determinism, not at all accounted for in his equation in the preface, reproduced above.

With this as background, I will move next to Bloom's implied theory of learning which can be found in his Taxonomy of Educational Objectives, I, Cognitive Domain. Bloom's objectives are to be stated in behavioral terms -- i.e., as descriptions of overt actions which students will take and which can be evaluated as such. Knowledge is portrayed as something to be discovered and remembered, not something to emerge from a transactive process between perceived self and psychological environment. In referring to "knowledge objectives," Bloom says, "To use an analogy, if one thinks of the mind as a file, the problem in a knowledge test situation is that of finding in the problem or task the appropriate signals, cues, and clues which will most effectively bring out whatever knowledge is filed or stored". Learning, it seems, is a matter of placing knowledge in a container -- the idea of mind as a storage-bin. Under "intellectual skills and abilities objectives," Bloom says, "The abilities and skills objectives emphasize the mental processes of organizing and reorganizing material to achieve a particular purpose. The materials may be given or remembered" (my emphasis). Bloom has moved, in a page or two, from tabula rasa theory to what strikes me as very reminiscent of Herbart's idea of mind (and learning) as a process of receiving ideas from the environment; and as ideas actively interplay in the mind, integrating what is received with what is already there into revised or new categories.

At one point, in pursuing Bloom's theorizing, I thought I had captured his position in at least one respect: students, whatever else they may be, are basically receivers of facts and rules, and directions for applying principles. But no -- in referring to evaluation (item 6 under "intellectual skills and abilities"), Bloom says evaluation involves "Judgments about the value of material and methods for given purposes . . . The criteria may be those determined by the student or those which are given to him". This is the only mention Bloom makes in discussing his cognitive objectives, of students determining anything; all other items are given to students (pp. 201-207).

What is one to make of all of this? The central thrust of Bloom's position is clearly behaviorism -- but a behaviorism cluttered with incompatible terminology and ideas. Philosophically, it is difficult to know any label to pin on Bloom other than that of an extraordinarily naive realist, a person who exhibits a tendency -- but a tendency fractured with inconsistencies.

In the second manual of the series, Taxonomy of Education Objectives, II, Affective Domain, the authors state in the preface that they "found the affective domain much more difficult to structure" than the cognitive domain. Considering the philosophical and psychological difficulties the writers encountered -- apparently unknowingly -- in their cognitive domain, I am rather surprised that they could write anything at all under the head of the affective domain. What is not surprising is that they would have students learn to value by first "receiving" and next "responding". After this, they are to begin "valuing".

More responsibility may fall on students as teaching proceeds under the affective domain. "From an extremely passive position or role on the part of the learner, where the sole responsibility for the evocation of behavior rests with the teacher . . . the continuum extends to a point at which the learner directs his attention, at least at a semiconscious level, toward the preferred stimuli." We are not told how students come to prefer one stimulus over another.

In discussing "receiving," the writers comment that this process may overlap with objectives in the cognitive domain. From the general tenor of the writing, I get the impression that the writers consider this unfortunate, that they tried their best to handle the affective domain so it would not intrude on the cognitive. The commentary offered with each item under the affective domain is a curious mixture of oversimplified behaviorism spiced here and there with a touch of garbled configurational or field psychology. They talk of "phenomena" as incentives to action in the same sentence in which they talk of "stimuli" eliciting responses (pp. 176-185).

The recent third manual in the series, A Taxonomy of the Psychomotor Domain, which does not include Bloom as an author but which obviously takes its cues from the general Bloom approach, contains a statement in the first chapter suggesting that "This model proposed for classifying movement behaviors unique to the psychomotor domain has been designed specifically to aid educators and curriculum developers to clarify and categorize relevant movement experience for children". After looking over this list of movement objectives, beginning with "reflex movements," and finding only movement, I do not understand why the author uses the word "experience," which to me means a great deal more than a miscellany of wiggles. But I can visualize a perspiring physical education teacher shouting at a group of perspiring students, "It is time now for you to experience segmental reflexes -- one, two, three, BEGIN!" This is at least in tune with what I see as going on in most public schools and it probably matters little whether the course is labeled physical education or civics.

We may have in the Bloomian approach about all there is to the accountability movement as it is being implemented in most school districts today. I have yet to find a book on writing behavioral objectives (although I have not read them all) which does not build upon the triad of cognitive, affective, and psychomotor domains. These books, and the practices I see stemming from them, have the effect of fragmenting students into three parts, as if they were not already fragmented enough by our alienating culture. In fairness to Bloom, he does state in the cognitive domain manual that "Some fear was expressed [by his collaborating staff] that the taxonomy might lead to fragmentation and atomization of educational purposes such that the parts and pieces finally placed into the classification might be very different from the more complete objective with which one started". The solution decided upon was to set "the taxonomy at a level of generality where the loss by fragmentation would not be too great". Yet it does now appear that at the level of actual implementation the fear of fragmentation was fully justified.

A couple of years ago, I was asked to review a book by George Isaac Brown (Human Teaching for Human Learning, Viking, 1971) for the review journal of the AESA, Educational Studies. Brown's book is about work then being done at the Esalen Institute at Big Sur, California. The program Brown describes is intended to help teachers develop strategies for affective learning. A number of these strategies are described in detail: fantasizing moods, learning trust, aggression exercises, improvisational theater, body trips, awareness continuums, and numerous other exotically-named exercises. No mention is made of activities involving thinking; and bodily movement comes into the picture only incidentally, as in connection with touching exercises or trust walks. I criticized the book for its exclusive focus on methods for teaching emoting, and the explicit assertion in the introduction that emotional expression can be taught apart from cognitive activity.

I was later interested in a review of the same book, written by Geoffrey Summerfield, of the University of California at Berkeley, for the Harvard Education Review (May, 1972), in which Summerfield says,

I question the curiously naked notion of "techniques for teaching in the affective domain". My quarrel is with the use of one's emotions or feelings as the explicit subject matter of the teaching-learning situation In life, feelings are intricately and complicatedly embedded in reflection, problem-solving, and action.

I get the strong impression not only from the literature, but

from what many teachers appear to be trying to do, that a course which has traditionally focused on cognitive learning can be properly balanced by reserving a period now and then for emotive exercises, or, if not that, that a curriculum which is generally academic can be balanced by requiring all students to take a course in the techniques of pure emoting.

As people live their lives, do they allocate a part of each day to intellectual endeavor, another and quite separate part to emotional expression, and another equally separate part to muscular action? If there are people who do this, I suspect they would soon become inmates of psychiatric wards. Yet, this is precisely what performance-based education, rooted in behavioral objectives organized according to Bloom's taxonomy, leads teachers to try to teach students to do.

I submit that persons function as wholes, not triads (although persons may think and feel without overt external motion). As they pursue their goals they think, feel, and move simultaneously. Thinking, feeling, and moving are all combined in a unitary process called living.

Documentations

1. Bloom, Benjamin S., Stability and Change in Human Characteristics, Wiley, 1964.
2. Bloom, Benjamin S., ed., Taxonomy of Educational Objectives Handbook I: Cognitive Domain, McKay, 1956.
3. Krathwohl, David R., Benjamin S. Bloom, and Bertram B. Masia, Taxonomy of Educational Objectives Handbook II: Affective Domain, McKay, 1964.
4. Harrow, Anita J., A Taxonomy of the Psychomotor Domain; A Guide for Developing Behavioral Objectives, McKay, 1972.

SECTION XIII

IDEALISM:
A CLARIFICATION OF AN EDUCATIONAL PHILOSOPHY

JOHN PAUL STRAIN

One reason the positions approach has fallen into so much disfavor in philosophy of education is the confusion surrounding the educational classifications of Pragmatism, Realism, and Idealism. It has become exceedingly difficult to identify the intellectual and educational elements of either Idealism or Realism. This difficulty has led to an avoidance of these terms or personal interpretations for teaching, that are incomprehensible and considered inconsistent by colleagues. There is no unanimity in the meaning and understanding of either Idealism or Realism. The purpose of this paper is to clarify one of those designations, Idealism in philosophy of education.

I

The most significant feature of Idealism as an approach to education is its philosophical base in Hegelian Idealism. This philosophy is the conceptual scheme providing the rationale for educational programs and methodology. The Idealism of Hegel, considered by Hegel himself to be the climax of all philosophy, provides for an explanation of the total realm of human experience. Whatever past contributions have been made in philosophy are integrated and organized into Hegelian Idealism. In a similar vein, all subsequent suggestions must be conceived as ways of assimilating new knowledge and newer approaches into this comprehensive system. It is important to note that confusion often occurs when analyzers of Idealism accept the incorporations of the new knowledge for the tenets of the system itself.

Many American Idealists have endeavored to adjust the philosophy of Hegelian Idealism to the life style of American political philosophy and the social science discoveries. More explicitly, they have attempted to incorporate the concept of American Individualism, the theory of Darwinian evolution, the data of modern psychology, and Objective Idealism into a synthesis theory of philosophy. Josiah Royce's philosophy is an example as witnessed by Harry T. Costello's Josiah Royce's Seminar, 1913-1914 (1) and Mary Briody Mahowald's An Idealistic Pragmatism: The Development of the Pragmatic Element in the Philosophy of Josiah Royce. (2) An examination of Royce's books and classes leaves no doubt that he was attempting a philosophical synthesis. Attempts of a like nature were made by other American Idealists.

The fact that such an approach was prevalent among American Idealists is important to those studying philosophy of education because

many American educators were basing their philosophical positions on such syntheses. Herman Harrell Horne, the most noted of the Idealist philosophers of education, was a synthesizer. Horne stated that the most influential philosopher on his thinking was Josiah Royce, and it was from him that he developed the notions of philosophy, methodology, and education. As a result, Horne followed Royce's approach in synthesizing which he readily admitted.

Horne, however, had studied Objective Idealism, knew the system, and recognized its educational components. He wrote in his own book (The Philosophy of Education) that the "masterpiece" of Idealistic philosophy of education had already been written, (3) and this masterpiece is Karl Rosenkranz's Paedagogik als System. (4) "Written in the spirit of Hegel," wrote Horne, this book is the classic text in philosophy of education. As far as theoretical justification of education is concerned, nothing can surpass it. Horne suggests that since the masterpiece has already been written, it is the responsibility of people like himself to open new vistas by relating the theoretical ground of Idealism to the new empirical studies of the social sciences.

The point that is clear in Horne's work is that he was a synthesizer. He never intended that his system be the representative system of Idealism in education. He was trying to correlate the traditional Idealistic philosophy of education with the developments in biology, physiology, psychology, and sociology. To be sure, there are clear strains of the Idealistic philosophy of education in Horne's work, and he indicates that they stem from Rosenkranz. His attempt, however, was clearly that of synthesizing. Therefore, it is a serious mistake to suggest that all of Horne's explanations of education are truly those of Idealism.

There are also certain special commitments that highlight the writings of Professor Horne. These commitments must be understood because they are often taken to be tenets of Idealism. These commitments are religious, i.e., (a) to God, as the infinite Person, the true Trinity of Father, Son, and Holy Ghost; (b) and to immortality as the infinite continuance of man's imperfect temporal existence. Indeed, the Absolute Idea is a fundamental notion in the philosophy of Hegel. But the religious connotations given to it by any number of Christian thinkers who claim to be Idealists, exploit Hegel's notion for purposes of Christian apologetics. Religious commitments of this nature are not commitments to Idealism as a philosophy but to Christianity as a religion. Idealism becomes merely a tool for rationalizing what has already been accepted religiously. Add the methodology of synthesis, and the facts of evolution and experimental

psychology (both anti-providential) can be incorporated into an interpretation for the continued belief in God and life-after-death. Horne himself recognized this strong commitment to religion. In order to clarify the situation, he wanted his system to be called Theistic Idealism.

In summary, if we are endeavoring to understand what Idealism as a philosophy of education stands for, we must avoid the distinctly Christian religious connotations which many of the apologists of Christianity have been using in the name of Idealism. Also, we should not confuse attempts at synthesis for the more definite system itself. It is for these two reasons that even J. Donald Butler's interpretation of Idealism is in error. There are two roads of intellectual pursuit, one in the direction of definiteness and consistency, the other toward synthesis and correlation. If we are endeavoring to discover the true meaning of Idealism in education, we must turn away from synthesis to the position itself as exemplified in thought and behavior.

II

It is a paradox of education today that, while it is virtually impossible to find a true Idealist philosopher of education in the academic sense of the term who is publishing and writing on the subject, there exists the thought pattern of Idealism having a strong influence on American education. This thought pattern is held by many and they are recognized by virtue of their call for a return to traditional education and "the good old days" of American Society.

Now what is a thought pattern that is possessed by individuals and works to the degree of being an influence in education? A thought pattern is an internalized order that gives direction and consistency to organized practices and ideas. This order is inherent within a person's feeling-cognitive system, functioning as the spring for accepting or rejecting data, ideas, or behavior. A thought pattern is an important phenomenon for the study of education because it is the source of practice.

For more than a hundred years the thought pattern of Idealism has had its impact on American education. Its popularity has varied from time to time in American education and culture. Its earliest and greatest prominence in education occurred in the last half of the 19th century under the educational leadership of William T. Harris, U.S. Commissioner of Education and Superintendent of the St. Louis Schools. Harris was not only

a philosopher and translator of Hegel, but introduced Karl Rosenkranz's Pedagogy as a System to American intellectuals by way of the Journal of Speculative Philosophy. The second important phase occurred in the 1930's as certain philosophers of education stated an educational position distinct from the Pragmatism of the day. These people called themselves "Essentialists". The term featured the notification that they were strong on traditional values, that the purpose of the schools was to teach the basics of the 3R's in elementary school and the essential subjects of [English, math, history, science, geography, and foreign languages in the secondary school. Michael Demiashkevitch initiated the term "Essentialism" and persuaded William Bagley to use it. The term has been utilized in philosophy of education ever since.

The third influential phase followed in the wake of post World War II conservatism. Writers and a few college professors, Arthur Bestor being the most noted, criticised the Pragmatic Philosophy in the American schools and called for a return to the basic and traditional subjects prevalent in the days before the advent of progressive education. These individuals organized the Council for Basic Education, and the following is a statement of its position:

The CBE believes that the school has many subsidiary purposes, but that its primary purpose is fourfold: (a) to transmit the facts about the heritage and culture of the race; (b) to teach young people to read and write and figure; (c) in the process of (a) and (b) to train the intelligence and to stimulate the pleasures of thought; and (d) to provide that atmosphere of moral affirmation without which education is merely animal training. (j)

The fourth phase is the contemporary political movement of law and order, stressing obedience to parental and legal authority, the value of work and discipline, and patriotic respect for country and leadership. Critical of what it terms "the permissiveness in childrearing practices in America," "indolent hippies," "leniency toward criminals," "the unpatriotic stand of contemporary youth unwilling to fight for their country," this movement has sought to rally its views around certain political figures, hoping that they will turn the course of American events back to the ways and manners of late 19th century America.

III

Let us now examine the major ideas of this thought pattern.

Progress. A fundamental tenet in the thought pattern of Idealism is progress. Progress means growth and evolution. This is not the evolution of biological improvement as defined by Darwin, but the development of cultures from primitive societies to successive stages of higher and advanced civilizations. The history of man is the progress of human life through great civilizations. The advance is both intellectual and moral. Absolute truth and absolute moral right are the ingredients of this advance. The ultimate achievement of man is to acquire these absolutes in behavior and thought. Man is partially successful in this endeavor when he works for this end. The marks of a civilized person as distinct from a primitive are: (a) the ambition to improve, and (b) the desire for truth. A savage is content to be what he is, living only for the moment, satisfying immediate needs. Civilized man seeks higher values and absolute truth. The signs of progress are: (a) the growth of knowledge and the usefulness of discoveries, i.e., geometry for building bridges, steam and combustion for powering engines, water for producing electricity; and (b) advanced moral development, i.e., cleanliness in body functions (bathing and excretion), politeness and courtesy in social activity, and respect for moral laws of state and church. Progress is never effortless. It requires discipline and perseverance.

Institutionalism. The study of history shows that civilizations not only rise, they also decline and fall. Decline is caused by the growing loss of moral values and disregard for absolute truth. People become indifferent to religion, skeptical and agnostic toward truth, and vulgar and lazy in moral behavior. To prevent this possibility of decline and fall, civilization preserves religion, truth, and moral behavior by institutionalizing them. Society creates institutions to preserve the gains and achievements of past generations. Progress, therefore, goes hand in hand with society's ability to institutionalize itself, and to have the people regard these institutions as basic to their way of life. From the standpoint of education, it means teaching the young allegiance and respect for institutions. A society is successful in its task of preserving its past when the young are taught to honor them. It is not particular individuals who are important in society, but the institutions. Paradoxically, with the presence of institutions, individuals are protected and freedom preserved. Society's major institutions are: (a) the family, for the control of sexual conduct and the rearing of children, (b) the nation, for preserving the standards of law and order in social behavior,

(c) the church, for preserving moral behavior and the comprehensive view of the truth, (d) the school, for preserving past knowledge, discipline, and practical skills. It must be noted, that teaching respect for institutions literally means that children go to school to prepare themselves for society by learning the things that have been accomplished in the past.

Self-Control. A greater burden of learning is placed on the young with each new moral and intellectual achievement. This fact becomes clear when one recognizes a fundamental presupposition of this thought pattern, that an infant is born into the world as an animal. Indeed, the infant has the potential to become human; but in the first stages of life, the child is literally an animal, interested only in the immediate present, seeking to satisfy pressing desires, and displaying current emotions. In the course of becoming an adult, the child learns to control his animal drives and to live beyond the present. In so doing, the person learns to be human. If he fails to gain this control, he continues as a little animal -- spoiled, selfish, and indulgent. He may even grow up to be an adult beast with all the brutality, inconsiderateness, and vulgarity that goes with adult power. To be human, one must have attained self-discipline. When one achieves this control, he is free, i.e., free from the immediacy of the moment and the pressing urges of animal drives. Self-control is the basis of human freedom, and it is the mind which accomplishes this control. This particular mind-function is called "will" or "will power".

Self-Estrangement. The first goal of education is to teach children self-control, the art of becoming free. The process by which this occurs is self-estrangement, and literally means, the estranging oneself from the original animal nature in order to learn a second nature, i.e., human nature. Learning the second nature goes by the name of "habit". To be human means, having attained a level of habitual conduct that is in agreement with the routines and habits of civilization at that level of progress. Habitual conduct is the means society has of preserving the social standards of civilized behavior, and the function of self-estrangement is to force the child away from his animal nature in order to learn human nature.

Discipline. As a general rule, a child cannot attain the necessary habits of conduct unless assisted by adults. There are incidents, however, where the loss of parents has placed untold hardship and responsibility on a young lad or girl, and through self-discipline and hard work such a person attains proper habits. These individuals are often revered as self-made men and women. Although such cases do occur because of the unusual circumstances of heavy work and labor placed upon them, in

most instances, a child learns the habits of civilized conduct through parental discipline. Since the tendency of a child is to be lazy, indulgent, and selfish, parents have to force the child into proper habits. Discipline and punishment are parceled out to children in proportion to the need for producing correct habits and avoiding animal ways. Society charges parents with the responsibility of performing this function. If a child does not change from his original nature, the fault lies with parents who have failed in meeting their social obligations.

School. Discipline that begins in the home, must be continued in the institution of the school. Discipline shall be rational. Every possible wrong act must be identified with explanations of ensuing punishments. The teacher in the school is to be totally rational and composed. Order rather than spontaneity highlights the structure of the day. The proper habits to be taught in school are: cleanliness and neatness, orderliness and punctuality, courtesy and obedience, quickness and accuracy. (6) In the words of faculty psychologist Ruric Roark: "The how of forming habits in school may be summed up in two words -- drill and imitation." (7) The possession of good habits is but another name for strong character. "As we sow habits in muscle and nerve and brain," says Roark, "so shall we, and those who come after us, reap in aptitude, in skill, in character." (8)

But the institution of the school has not only the responsibility of continued training in moral deportment, it also has the responsibility of preserving the knowledge of civilization. This is accomplished by mastering the summaries of knowledge found in textbooks. Books serve to preserve knowledge and truth. What is written down, cannot be lost. The young need to master the skills that enhance this preservation, meaning the children must all learn to read, write, and do arithmetic. Hence, the 3R's are the essential subjects of the elementary school. In secondary education, the students are to put these skills to work in mastering textbooks in science, history, geography, foreign languages, literature. Teaching techniques are geared to mastering textbooks; i.e., homework, recitations, outlining, skeletonizing, and examinations. The textbook, indicates William T. Harris, is the greatest educational tool that has yet been devised. It organizes knowledge in an objective way, it is something that the student possesses so that he can read the material over and over again, and it prevents the teacher from bringing in subjective opinions on what is objectively true.

Public Schools. The school is to teach the young: (a) habits of conduct, and (b) knowledge for preserving civilization. The best means for guaranteeing that the schools shall function for this end is to

institutionalize them within the national system of government. The nation can guarantee this preservation by establishing a common or public school system, organized and supported by the state, and utilizing state laws to require children to attend, i.e., compulsory education.

National Progress. While all children are endeavoring to catch up with the adult world of proper moral conduct and knowledge of what is true, nevertheless, the schools should identify those few gifted students who may someday add contributions to national progress. Such children will learn the essentials of knowledge faster than others. In order to challenge them intellectually, these students should be separated either in special schools or special tracks within schools. Materials will be covered more quickly, the work will be more difficult. These special students will go on to higher education, where they can perform research and learn truths not yet discovered. It is from these persons that intellectual and moral progress occur. They are the intellectual leaders of society. In the course of time, the truths and benefits which these individuals have discovered will be written down for posterity and made useful for the general population. By utilizing the discoveries of intellectuals, the nation climbs a step forward toward absolute truth in a universe of inherent order and coherence.

National Leadership. Hegel states that the best form of government is a constitutional monarch. It is very clear in Hegel that he never expected the philosopher to be a political leader as the case with Plato and his notions of philosopher kings. The philosopher's role in this thought pattern is that of the ivory towered intellectual who sees the comprehensive view of history and works to achieve the whole truth of reality. Political leadership is an immediate and practical enterprise, and would bore a first rate speculative philosopher.

A government of constitutional monarch means first of all that society will rest on the rational foundation of the past. More explicitly, it will rest on the nation's constitution, the objectified and rational documents of society's order. "It is absolutely essential," writes Hegel, "that the constitution should not be regarded as something made, even though it has come into being in time. It must be treated rather as something simply existent and by itself, as divine therefore, and constant." (9) Society is rooted in the past by giving its allegiance to the nation's constitution.

But immediate and pressing issues of government must be managed. Therefore, national security and order require some kind of living head or person to make decisions. Just as the animal organism requires a head to

determine what direction the body will go, so too with the organism of the state. The one head determines the course for the corporate body. Hegel suggests that this head be a monarch on a basis of hereditary succession. A monarch, indicates Hegel, guarantees continuity with the past and prevents factions from bringing discontinuity into government. The absence of a monarch for the citizens of the United States, however, does not prevent them from accepting a similar role for their head of state. The thought pattern presses them to interpret the presidency as the sole office of leadership. The president of the United States is to be respected, trusted, and unchallenged as the true head of the nation.

IV

The study of any particular thought pattern reveals the reasons why individuals say what they say and behave the way they do. Because of this revelation, the study of thought patterns is an invaluable enterprise. But the value in relating the thought pattern of Idealism to the theme of the conference THE FUTURE, is the explanations it provides for clarifying contemporary behavior patterns and issues, i.e., (a) the conservative call for more training in reading in the California public schools, (b) the criticism of the new math and demands for mental arithmetic and practice in computation, (c) presidential explanations of the Watergate incident, and (d) reverberations over the Agnew resignation. As one writer, Haynes Johnson of the Los Angeles Times wrote: "Spiro Agnew, as the cliché goes, was not capable of practicing what he preached. That does not make his prescription for the ills of democracy any less valid. His own tragic example is yet another lesson to be learned."

As to the future of this thought pattern? Who is to say. No doubt the Watergate scandal and the Agnew indictments curtailed the political push of this movement. On the other hand, maybe the scandal has drawn people's attention to a renewed acceptance of absolute values and absolute truth. Only time will tell, and much will be revealed as we listen to the candidates for public office pose their answers to the issues at hand and attend to the response of the people.

Documentations

1. Harry T. Costello, Josiah Royce's Seminar, 1913-1914, ed. Grover Smith (New Brunswick, N.J.: Rutgers University Press, 1963).
2. Mary Briody Mahowald, An Idealistic Pragmatism: The Development of the Pragmatic Element in the Philosophy of Josiah Royce (The Hague, Netherlands: Martinus Nijhoff, 1972).
3. Herman Harrell Horne, The Philosophy of Education (New York: The Macmillan Company, 1904), pp. 11, 12.
4. J. K. F. Rosenkranz, "Pedagogy as a System," in Modern Philosophies of Education, ed. John Paul Strain (New York: Random House, Inc., 1971), pp. 128-143.
5. C. B. E. Bulletin, No. 2 (September 1957).
6. Ruric N. Roark, "Psychology in Education," in Modern Philosophies of Education (New York: Random House, Inc., 1971), p. 147.
7. Ibid., p. 147.
8. Ibid., p. 147.
9. George Wilhelm Friedrich Hegel, Philosophy of Right (Oxford: At the Clarendon Press, 1942), p. 178.

SECTION XIV
ETHICS, REALITY, AND EDUCATION:
THE PARMENIDEAN ERROR

LEONARD FELS

Ethics is intimately connected with reality. There may be "a priori" propositions -- in C. I. Lewis' sense -- among the first principles of any ethical theory. These "a priori" do not depend on what is, in the sense that they can neither be proven true or false by an appeal to experience. However, even here, a connection with reality must be made if these first principles, assumptions, or implicit ideas -- some of which may be "a priori" -- are to be used in the application of theory to practice. Aristotle would say, ethical theory can be tested only if it can be used to help solve practical human problems in a moral manner. An inherently untestable theory makes no sense.

Morality is only found in action -- and in action of a certain kind. All moral theory is about actions which can be thought of as moral, immoral or non-moral because they produce or intend to produce results of the kind which the theory prescribes or proscribes. Happiness or well-being is the activity of living in accordance with virtue over a lifetime according to Aristotle. According to what Aristotle means by "virtue" and "well-being," any action can be judged good or bad by applying the theory to the specific case. Aristotle clearly derives his theory from his understanding of the function of man as a political and rational animal and what he understands to be the fulfillment of the potential of the human animal. Aristotle's theory is based on an interplay with reality. The application of the theory to specific instances also depends on an understanding of the contextual reality of those instances. A similar statement of the relationships between ethical theory and the understanding of reality from which it is derived and to which it is applied can be made of the ethical theories of men like J. S. Mill, John Dewey, and Bertrand Russell.

It has long been thought that Kant's theory was so different that in it there could be no relationship between the "is" and the "ought," Kant, himself, thought he could deduce the moral law from the nature of pure reason. The resulting categorical imperative -- his moral law -- is a very generalized statement which neither prescribes any specific action nor does it seem to be a generalization from sets of facts. It, however, would not be an effective moral law -- that is, it would not make any difference to human beings and could be ignored unless human beings believed it to be true and worth acting on. If it were in no way connected with reality, there would be no way to act in accordance with it. We cannot prove the law of non-contradiction without assuming it, as Aristotle pointed out many years before Kant. It is proved by doing certain things. Kant's formulation of the moral law was based on a knowledge of the nature of reason -- and of rational beings. It was not something derived imaginatively out of thin air. Application of the moral law also required

a clear grasp of the real situation in which it was to be used.

In Kant's second formulation of the moral law, we have briefly the following: "Act so that you treat humanity, whether in your own person or that of another, always as an end and never merely as a means." This formulation which Kant deduces from the first form of the categorical imperative expresses the basic idea of humanism -- that human beings have value just because they are human beings. One human being is not merely to be used by another -- or by himself -- as a means to some end, but is always to be treated as having worth in himself. He does not have to be baptised, or belong to some privileged group; he merely needs to be human to deserve this treatment either from himself or others. Each man should have respect for himself and others because of his humanness.

This formulation of the moral law is certainly, from Kant's point of view, related to the real nature of man. If one looks at it in isolation, one could say that it cannot be proven that men have worth just because they are human. But if this is seen, as Kant saw it, as an idea logically deduced from the first formulation, which was deduced itself from the nature of pure reason, it can be viewed as directly connected with the nature of man as a rational being. To Kant, action in the moral area is the vehicle by which to go from the phenomenal to the noumenal (real) world. In action, human beings are involved with things-in-themselves-the-real-world -- which we cannot reach as long as we stay in the realm of pure reason.

So we must conclude that Kant's ethical theory is intimately connected with reality. Though it seems to start with a major "a priori" proposition not derived from experience, Kant links it to experience.

Without this connection, Kant's theory would have never had the force of a major ethical theory, since it would have made no actual difference in the way men acted or judged their actions.

An intimate relationship between ethics and reality is essential to a philosophy of education. Since we view education as a branch of ethics -- as one application of ethical theory -- we must be clear about the nature of the ethical theory we are going to apply. We must further clarify our concept of the real world in which we are going to attempt an educational philosophy. Aristotle, Plato, Kant, J. S. Mill, Dewey, Russell, the Stoic philosophers all applied their ethical theories to their own cultures -- and evolved educational philosophies related to their own cultures. Their theories, however, are not limited to their cultures as each involves a fundamental methodological approach that might be applied to the problems of education in any culture.

Any theory, ethical or otherwise, that refuses to test itself against reality makes what I have called "The Parmenidean Error". The name derives from that early Greek philosopher who committed the error in classic form. It was his follower Zeno who developed the famous paradoxes based on this error.

The error followed this argument: "I have developed a logic about the universe, the universe is logical -- therefore my logic describes the universe -- its reality -- the way the world really is." Of course, this is a paraphrase of the argument -- but I do not think it is a distortion. On the basis of this argument, Parmenides and Zeno made the following types of statements: (a) Being must be one -- not many. If it were many -- one would have to say that there was non-Being in between the various Beings. But if we can speak of non-Being -- it must exist. It is therefore - Being - therefore all is one. (b) Nothing changes. For change to take place, Being would have to become non-Being. But that is impossible -- since we can conceive of non-Being, it is also Being; therefore Being always remains Being. (c) Motion is an illusion, everything remains the way it is -- one of Zeno's examples of this is of an archer shooting an arrow at a target. For the arrow to get to the target, it must first go through a halfway point. But before it goes halfway it must go quarter-way. For every point you can think of the arrow going through, you can think of one half-way to this point it must go through. Between any two points on the line from the archer to the target there are an infinite number of points. Even spending an infinitely small amount of time in any point, the arrow must therefore spend an infinite amount of time to go from any point to the next point. Therefore, the arrow never gets started -- because even to move to the next point from the starting point would involve an infinity of time. Hence, if you think men can shoot arrows at targets, you are suffering from a delusion. Motion does not really take place -- change is an illusion.

Parmenides, aided by Zeno's brilliant examples, has much more to say, but it all goes to prove the same point. No change can take place in the world, and this can be logically proved. What Parmenides has said is that he has developed a logic which describes what the nature of the world must be, and anyone who does not think the world is like this, is suffering from illusions. Every generation has its Parmenides and its Zenos.

In the development of American life, Santayana says (1), there never was any fundamental connection between morality, ethics, religion, and the ideals commonly accepted by Americans on the one hand and the actual life that was being lived, on the other.

Anyone who mentions ethics in American life outside the Clergy or the Universities is accused of being "unrealistic". This was often a theme in American literature, in Tom Sawyer, in Babbitt, and in The American Tragedy. The ethics that received lip-service really were not related to activities in business and the developing American culture. Ethics and Aesthetics were relegated to the home and church, while "real" work was done in factories and businesses.

Ethical theory that was not usable in the "real" world was functionally discarded, though most people, to this day, would not admit to having given up the "ideals" of the 18th and 19th Century, what Santayana calls "The Genteel Tradition".

A rather interesting example of a group clinging to an ideology that, like the Parmenideans, wouldn't stand up to a test with reality, is to be found in the New Left, especially in the student branch of the New Left in the 1960's.

The New Left looked about the society and found certain things "wrong" and dysfunctional. Logically, they concluded, with such great flaws the society was about to experience a revolution. Following from this the student leftists developed an analysis of the universities and colleges as organs of reactionary capitalism. (2) From this, still proceeding logically from their own point of view, came the idea that the universities and colleges had to be destroyed. Since the New Left agreed that a revolutionary situation existed, they believed that they could lead the students to destroy the universities and that the larger society would follow by destroying capitalism.

The movement went to much greater extremes in France than anywhere else. The students as a whole failed to follow the New Left except in France, and the larger societies rejected the New Left almost completely.

As the New Left developed its theories independent of reality -- however logical the theories may have seemed to be internally -- the student movement of the sixties died out. Their mistake was as old as Parmenides' -- 2000 years old.

Men can and do change their world. However, at every stage of change the world is what it is and change is accomplished by clear-eyed recognition of real conditions. Defeat in attempts to change the world follows the belief that the world must be what we think it is. Change is accomplished by action. In action the reality-correspondence of a philosophical theory is tested.

By agreement in the observations of trained researchers, scientific method provides a means for testing some kinds of theories against reality. An experiment that is "proved" can be repeated by any other researcher with the same result. In order to achieve this uniform result, physical and biological scientific research is more circumscribed, more severely limited and disciplined than most ethical problems allow. Science in practice has a self-correcting methodology because science is a social enterprise. There is a continual testing in practice of the theories that are advanced.

Because human ethical problems have more variables, human beings cannot be as accurate in this area as in the physical sciences. This does not mean that ethics cannot be approached scientifically. Objectivity can be achieved.

An educated man would not expect more accuracy in the results of any investigation than the material permits, as Aristotle pointed out.

There is a story about a man driving on a lonely back-country road. He is lost. He asks a farmer standing by the road, "Could you tell me how to get to Brownsville from here?" The farmer thinks for a moment and then says, "You can't get to Brownsville from here."

The story is funny because on this earth we always think we can get from any place to any other place. Yet even in the context of the automobile on a country road, the farmer's reply has meaning. If the driver went back to some other place and started on another route, he might be able to get to Brownsville, but if he kept going on this road he could not get to Brownsville.

There is another, and it seems, more powerful implication in the story: Many people have goals that they think they want to achieve. From where they are, they cannot achieve these goals. They must move into some other space so they "can get to Brownsville from here". Yet we find that it is a common experience for people to hold to goals which they cannot achieve. They usually do not know this because they have misjudged the place where they are, the road they are on, or the reality of the context within which these goals must be achieved. They make the Parmenidean error by not recognizing the real nature of their present position and how to travel to their goal.

To be worth its salt, an educational philosophy must be related to the contextual world in which it must function. It projects a hypothesis: What qualities in human beings does it seek to develop by the

educational process; by what specific means can this be achieved in the cultural context in which it is operative.

The goals or results of a philosophy of education can only be judged good or bad in ethical terms. Does the educative process succeed, and are the human qualities developed in such a way that the happiness, well being, and human potential of those educated according to this philosophy flourish?

In an educational milieu established on the basis of a philosophy of education that checks theory against reality both for derivation and application, theories that do not or cannot work are discarded. If theories appear to be merely personal or cultural prejudices, if they do not "work" in reality situations, people can be well enough trained to be aware of this, and be willing to give up any theory that is not in correspondence with reality.

A failure to discriminate between theories of what is and hypothesis for social change may lead to occasional misconceptions of the point under consideration here.

The nub of the philosophy of education that is being advanced is that from the earliest years in education there is both practice and understanding of the theory that beliefs, ideologies, generalizations of all kinds, can be tested against reality. Hypotheses, dreams for the future in whatever area of human life, need not be restricted by this. Rather, their achievement becomes far more a possibility, their failure less likely. It is self defeating to attempt to change the world from a "space" or theoretical position that does not fully grasp present reality.

Documentations

1. Santayana, "The Genteel Tradition" in Santayana on America. Ed. by Richard Carlton Lyon. Harcourt, Brace & World, Inc., New York: 1968, pp. 36-57.

2. Fels, Leonard, "Some Philosophic Implications in Student Protest Statement," a paper delivered at the Far Western Philosophy of Education Society meeting, San Francisco, 1968, and printed in the Proceedings.

SECTION XV

MARTIN BUBER AND THE ONE-SIDED DIALOGICAL RELATION

DONALD S. SECKINGER

Martin Buber has probed perhaps most deeply and movingly into the tangled strands of human being in our century and, for our purposes as educators as well as philosophers, to have written most directly about educative acts from a theistic existential perspective. Within the limitations of this paper I propose to focus on what is probably Buber's least understood concept: the one-sidedness of the teaching relation in the context of dialogical relations generally.

At the root of becoming for human beings is what Buber calls the "originator instinct". Speculative philosophers may argue as to who put this instinct into man and the why of creation as such, but Buber finds it more fruitful to take existence as a given fact and trace out the human expression of origination and its significance for the development of man. In his essay on "Education" in Between Man and Man, he describes it thus:

. . . (it is) an autonomous instinct, which cannot be derived from others, whose appropriate name seems to me to be the "originator instinct". Man, the child of man, wants to make things. . . . What the child desires is its own share in this becoming of things: it wants to be the subject of this event of production. (1)

Buber does not question the origin of the creative originator instinct. For him it is enough that it exists, that the world is born again with each human life thrown into existence, and that the educator must confront this fact of being with his own:

. . . the decisive influence (in educating) is to be ascribed not to the release of an instinct but to the forces which meet the released instinct, namely, the educative forces. It depends on them, on their purity and fervour, their power of love and their discretion, into what connexions the freed element enters and what becomes of it. (2)

The unfolding of the instinct, even under benign social influences, is not enough. All educative forces must be dialogical, avoiding both egoistic self-containment and the mode of social interaction which is nothing more than transitory mutual self-interest. Creative accomplishment for oneself, even in the company of others, is insufficient.

A community of laws and customs, in school or society, is better than no community at all. But the best is a dialogical community, a community of love and of sacrifice. "Action leading to individual achievement," says Buber, "is a 'one-sided' event. There is a force within

the person, which goes out, impresses itself on the material, and the achievement arises objectively: the movement is over, it has run in one direction from the heart's dream into the world, and its course is finished." (3)

The insufficiency of a one-sided action or material achievement is not balanced out by a retreat into the soothing rituals of organized religion as such, the mere social consensus of democratic ethics, or the rationalizations of Marxist ideology, no matter how well intended or comforting these activities may be. Such involvements may make us feel that we are doing something about our freedom to be, but it is all an illusion if there is no meeting one another in the sacrificial risk of love.

Buber's dialogical alternative, as we try to go beyond the originator instinct, moves us from a community of interest and function, up from the outward forms of religion, ethics, and ideology, and closer to the inner heart which these symbol systems were intended to explicate. First find yourself in relation to others, in giving and helping and sharing which transcends social roles and duties, and then you are truly living your way into a life -- be it the life of the Methodist or the Marxist.

Living precedes learning. Mystery and wonder and joy precede and breathe life into social and intellectual systems:

. . . as an originator man is solitary. He stands wholly without bonds in the echoing hall of his deeds. Nor can it help him to leave his solitariness that his achievement is received enthusiastically by the many. . . . Only if someone grasps his hand not as a "creator" but as a fellow-creature lost in the world, to be his comrade or friend or lover beyond the arts, does he have an awareness and a share of mutuality.
(4)

Viewed in this light, all social philosophies are inadequate because they are merely social. They take their life from a glorification of the originator instinct, which is then distorted into acquisitive or mutually self-interested channels. The object values of traditional knowledge as power and control, no less than the ingenious strategies of social ethics to gloss over the I-it relations of modern living, are bound to fail in meeting man's deepest needs. Social philosophies and objectified systems of religion are alike in that they fail to take seriously the spiritual locus in which we live and move and have our being.

Human freedom, therefore, must be characterized not merely in terms of minimizing external restraints, nor even from the view of maximizing external opportunities in the social order -- although both of these are necessary conditions to the meaningful exercise of inner freedom. All material approaches to the problem of freedom, as important as they may be, can only set the stage for the process Buber calls communion, in which persons go out from themselves to others in wholeheartedness and trust:

. . . at the opposite pole from compulsion there stands not freedom but communion. Compulsion is a negative reality; communion is the positive reality; freedom is a possibility, possibility regained. At the opposite pole of being compelled by destiny or nature or men there does not stand being free of destiny or nature or men but to commune and covenant with them. . . . Freedom is the vibrating needle, the fruitful zero. (5)

What are the central tasks of education? At the least these must involve so arranging the social order that external restraints are minimized and legitimate opportunities to learn are opened as widely as possible. More important, and proceeding from these raw foundations or, more typically, in conjunction with them, is the kind of educator who will call forth in relation with his learners an invitation to share anew in the discovery and wonder of knowledge. Educative situations always will be in a state of expectancy, contingency, and anticipation of an unanticipated mystery which is the mystery of encounter:

. . . Freedom in education is the possibility of communion; it cannot be dispensed with and it cannot be made use of in itself; without it nothing succeeds, but neither does anything succeed by means of it: it is the run before the jump, the tuning of the violin. (6)

The learner's freedom, just because it exists as possibility in educative situations, becomes his responsibility no less than his teacher's when the teacher is in the situation with him. Dialogical freedom is not license to do only what one feels like doing, for to do this would be to regress into the self-willed impasse which drains freedom of all possibility of growth. "Life lived in freedom is personal responsibility or it is a pathetic farce." (7)

Freedom well exercised by learner and teacher yields up blessings in knowledge of which neither had dared to hope, or even to visualize. If

your teacher stands before you as a present being, and you are to him a fellow subjectivity and not a mere object of use; if he goes out to you in expectation of meeting you as a presence in the world; then and only then are you mutually included in one another's reality. You have by this inclusion brought about a higher reality for you both:

Inclusion is . . . the extension of one's own concreteness, the fulfillment of the actual situation of life, the complete presence of the reality in which one participates. . . . this one person, without forfeiting anything of the felt reality of his activity, at the same time lives through the common event from the standpoint of the other. (8)

The dialogical relation, then, must be characterized by inclusion. It must involve common shared experiences. Most of all, at least one of the parties involved must be able to see things not only through his own eyes, but from the standpoint of the other. This is especially true in helping relationships such as healing, ministering, and teaching; without this vision, the helper cannot function.

But for all of this mutuality and sharing, these helping relationships are of necessity one-sided dialogical relations. They are clearly distinguished by Buber from the more fully matured dialogical relations of friendship and familial love. Although the teacher, for example, may see both his own and the learner's side in their dialogue, the learner for his part can only imagine the teacher's side.

It may well be argued that Buber narrows his conception of teaching at this point by taking away all that he has built up before. Indeed this is, in its own way, as much of a paradox as is the inscrutable universe which includes us all and which makes demands upon us which we must take on faith and infer from their consequences, yet will never fully understand.

In speaking of the helping relationships, Buber shifts from the grounds of spiritual fellowship to those of moral and intellectual authority. He postulates that it is in the nature of being a pupil to exist in a zone of more limited horizons than one's teacher. The teacher, moreover, would have always as his goal the aspiration that someday his pupils would go beyond his own replication of experience and would then enter into a two-sided relation as friends.

Buber retains the underlying conception of spiritual fellowship as well as human solitariness in his perception of anxiety and the

inevitability of a certain degree of failure. The teacher must be willing to submit himself to a basic ego sacrifice in which he often will be humbled and sobered in the knowledge that he is not reaching others as he would like. Attention is called to this chastening experience which is familiar to all sensitive persons who would attempt the dialogue:

. . . The man whose calling it is to influence the being of persons that can be determined, must experience this action of his . . . ever anew from the other side. . . . Only when he catches himself "from over there," and feels how it affects one, how it affects this other human being, does he recognize the real limit, baptize his self-will in Reality and make it true will, and renew his paradoxical legitimacy. (9)

Teaching must be sharing and feeling "from the other side" or it is an empty exercise, and yet it can never be two-sided in the dialogical sense while it is taking place. Only after one has learned more from his teacher than either of them knew existed is he able to go on his own way -- and not as a mere disciple, but with what he now knows and what his teacher has helped him to know -- only then will he be educated to his possibilities as a person in the world. His role of pupil is of necessity one of faith and dependence, no matter how intense the mutuality of give and take in the educative act:

. . . He (the teacher) experiences the pupil's being educated, but the pupil cannot experience the educating of the educator. The educator stands at both ends of the common situation, the pupil only at one end. In the moment when the pupil is able to throw himself across and experience from over there, the educative relation would be burst asunder, or change into friendship. (10)

The educator consistently must be in tune with the growth patterns of the learner and must recognize both his own and the learner's strengths and weaknesses. It is a rare person who is able to teach dialogically, to subordinate his own self-will to the shared reality of the learning situation. Buber shares a glimpse of what it must be like:

In learning from time to time what this human being needs and does not need at the moment, the educator is led to an ever deeper recognition of what the human being needs in order to grow. But he is also led to the recognition of what he, the "educator," is able and what he is unable to give of what is needed -- and what he can give now, and what not yet. (11)

For the teacher the situation is particularly poignant because it demands a recognition that no matter how intensively and passionately we want to give to our pupils, we will not be able to reach many of them in the right way at the right time even though we go out to them wholeheartedly as an act of sacrifice and trust.

The paradox of dialogical education is that we are called forth to give in spite of our own weaknesses, and yet its glory is just that we may glimpse on occasion the spark of recognition which comes from the "other side". "The constructive forces," Buber reminds us, "are eternally the same: they are the world bound up in community, turned to God. The educator educates himself to be their vehicle." (12)

Documentations

1. Martin Buber, "Education," in Between Man and Man, Trans. Ronald Gregor Smith (New York: The Macmillan Co., 1965), p. 85.
2. Ibid., pp. 86-87.
3. Ibid., p. 87.
4. Ibid.
5. Ibid., p. 91.
6. Ibid.
7. Ibid., p. 92.
8. Ibid., p. 97.
9. Ibid., pp. 99-100.
10. Ibid., pp. 100-101.
11. Ibid., p. 101.
12. Ibid.

SECTION XVI

SYMBOLING:
THINKING, CULTURE, AND ALTERNATIVE ASSESSMENT

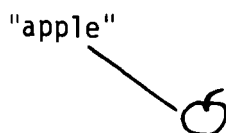
COLLEEN S. DECKER

The Problem of Symboling

To begin to talk about symboling, we must first refer to the meaning of symbols. How does a symbol get to be a symbol? Are there different kinds of symbols? Do symbols have their meaning in the past, the present, or the future? Are symbols "natural" to man or are they constructed by man? Are all symbols basically the same? While some of these questions must remain buried within the morass of philosophic confusion, it may be possible to begin at a basic level to explore some problems with the questions about symbols.

A symbol is usually contrasted to a sign and is sometimes classified as a case of sign. (1) A sign is seen by some writers as that which carries intrinsic meaning. The dog's hair stands up on its back in the presence of any object that carries this intrinsic meaning: e.g., its own image in a mirror, an intruder, or another dog. The meaning in a sign is purportedly transferred directly without the mediation phase. This is to say there is no "thinking" between the stimulus and the response.

Symbols, on the other hand, are often taken as special cases of signs where the mediation phase has intervened and the object comes to be represented by a symbol. The symbol then stands for and represents the object.

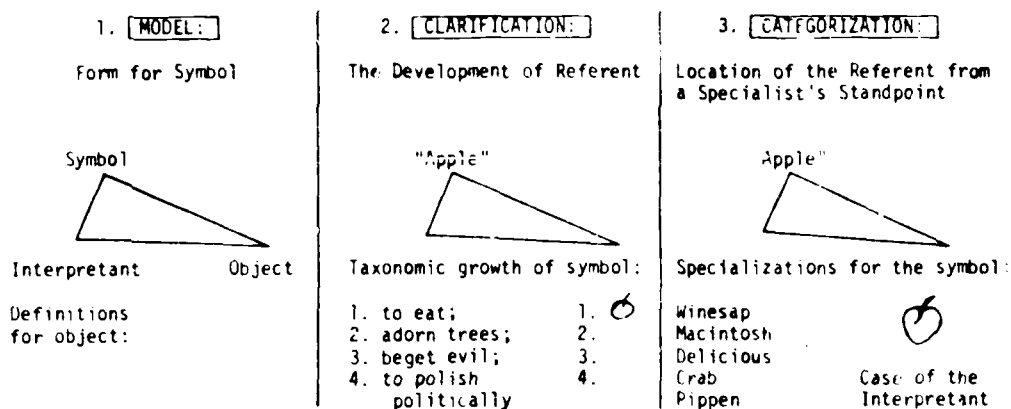


One may confuse the symbol with the object only at the risk of insanity or a total loss of intentional communication. (2) It should be trite to point out that a symbol gets to be a symbol when it can be used in place of but not for the function of an object. A term in this sense refers to but does not present or exhibit the object for which it stands.

A symbol used to represent the object often enough will usually become a shared symbol. Two users of the symbol can be said to be in communication when their symbols refer to the same object. The users will behave in an identifiable way in the presence of the shared symbol. Within any given group the common language for a common object yields shared meaning. A group is then identifiable by means of the other symbols that they mutually develop.

A symbol can grow when the interpretants for the symbol increase in number. For instance, a given symbol gains extension when it is classified or placed in a taxonomy:

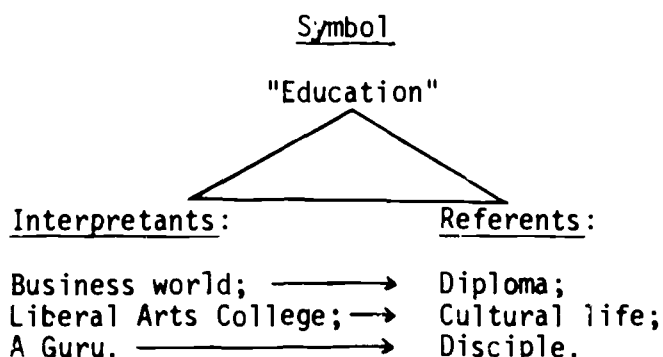
Symbol Growth



Once again then when a symbol is given its proper context, a shared base for meaning, the actions expected as the symbol is employed become identical to the symboling.

Symbols Become Symbols: A Clarification of the Meaning of Symbols

Are there different kinds of symbols? For the purposes of simplicity, (4) it can be held that there are only two kinds of symbols. Symbols can be classified as representational and qualitative. (5) As indicated above, the symbol is representational when it stands for something other than itself. The symbol can never be what it represents. This kind of symbol can be called a theoretical symbol. The transfer of meaning with theoretical symbols is the basis for science exchanges as well as the cause of arguments between groups when there is a confusion of interpretants, semantic issues, or when there is a lack of shared referents as in pure research. The arguments are most likely to occur when the interpretants of the theoretical-representational symbol are not shared:



The variety of interpretants implies a variety of assumptions from which the referent is a predictable emergent. When the referent becomes a goal, the meaning of the symbol and of the interpretant are made operational and precise. For instance, the Guru would hardly consider a diploma evidence of an education and the Liberal Arts College would be unhappy if it only produced direct disciples of the teacher. The problem comes into focus when the term "education" is used in an ambiguous sense and each person in an interchange uses a different interpretant. Shared meaning is accomplished when the referent is clearly specified as the purpose of an interchange.

One reason the representational symbols eventually lead to understanding and often to agreement is that once the interpretants are clearly tied to appropriate referents the only argument is about the inferred values, not the clarity of the issue. The problem must then be one of a value disagreement between the parties, a disagreement as to the value of the referent as a goal and not to a lack of understanding of what is meant by the words used.

The explication of all three parts of the symboling process can only lead to a clear sharing of meaning. There is nothing in the symboling process, to this point, which will help someone value or devalue that which is now perfectly clear in meaning and implication. The theoretical symbol helps produce precision but does not ostensibly offer a prescription:

Symbol

"Education"



120 college credits;	—————→	located on a transcript
Four years in Navy;	—————→	discharge papers
Marriage.	—————→	silver anniversary

The referent is clear. Yet there is no need to cherish one referent over another.

The second kind of symbol is called a qualitative symbol. Some writers refer to a silent language (6) which includes such things as the use of space in communication, the non-logical or phatic use of language, gestures or body language, and clothing (7) as costuming. More recently in efforts to measure the cultural or qualitative impact on the thinking process, there have been attempts to measure by analogy, the qualitative symbol as a symptom of the possible level of intellectual attainment of alternative cultural expression. (8)

A child learns his qualitative language in his continued exposure to the gestures, inflections, dress, and proximity of those around him in his early life. It is in this range of symbols that his ways of thinking, his thinking style, is developed or programmed by imitation. As is usually the case, theoretical symbols are used to teach for and to describe this phase of the symboling process. The qualitative process is lost in all such attempts and tests are not constructed to identify the qualitative phases in thought, much less teach for these phases. Children are able to resist anything which they can learn to articulate but they deliberately have difficulty resisting or learning what is transferred to them in subliminal forms in qualitative terms or as a basic life style with which he identifies as his ethnic base.

The classic example of silent transfer in qualitative form is the phrase "Damn it! I'm not either dogmatic," or "Your actions speak so loudly I can't hear what you're saying." The child gets the point but not the theoretical idea. The representational bows to the qualitative symbol and is usually itself justified by a qualitative argument, one in which the goal winning a point, not clarifying a point.

The most important facets of our lives are determined by the

qualitative symbol. Yet, nowhere are teachers actually trained in its definition and use, in the implications for curriculum construction, and in the development of assessment devices for qualitative growth.

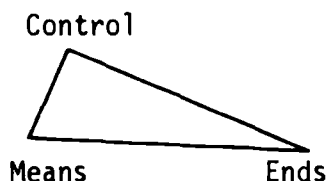
When qualitative symbols, or "noise" factors, are considered, they have been placed in direct subordination to the theoretical symbol in our society. For example, only in recent years has the development of multimedia bombardment been seen as important to instruction. The tragedy is that even now these media are only helpmates to something other than themselves; i.e., they are still thought of as facilitators of theoretical symbols rather than as qualitative decision systems, frameworks in which a student can gain prestige for the style of his thought rather than for his memory for the factual point presented to him to remember.

The dualism of symboling as theoretical and qualitative could be seen as exhausting the possible variations of the meanings of symbols. Each combination of ideas or communication patterns can be explained in terms of these generic symbol systems.

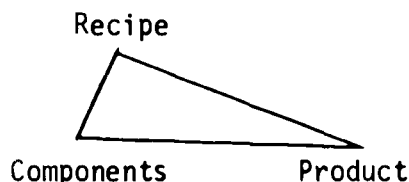
Symbols as Mediators: Thinking

Do symbols have their meaning in the past, present, and future? It is curious to note that we can only talk of symbols as directing agencies. A symbol is a symbol by virtue of the function it performs. It must perform a function, a mediation function, a relating service. Symbols carry meaning from the interpretant to the referent: (9)

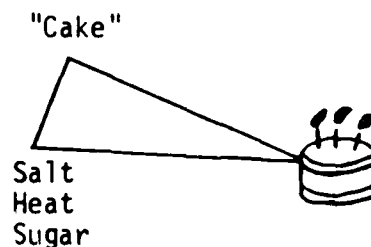
Generic Case



Method



Example



The curious part is that there is more to the process than simply having the symbol represent or stand for its referent. The referent is somehow equivalent to the goal in the thought process. The goal or referent can in this sense become the agent to its own development. This means that when the referent is an agent, it dictates the means, or informs the means, which can be used to produce the referent form itself. Once the product-recipe-component sequence has been formed, there must be some kind of a re-institutable control if it is to be formed again. The method generic case, then, does the job of mediating between the hoped-for product and the recipe for the product.

The direct implication of this analysis then is that all symbols are future in character and controlling in function. Whether one talks about the "past," the "present," or the "future," the symbols are always shorthand goal statements. A qualitative or presentational symbol, one that is what it says, functions in the future tense to the extent that it exhibits its meaning in a context even though the context is a hidden and usually silent symbol system. The context is an informing system. This silent symbol system is what is most often neglected in the subtleties of

thought identification. The error comes to fruition in the use of standardized tests for the assessment of minorities or in the effort of any culture to influence its children or preserve an ostensibly ineffective pattern in the face of cross-cultural exposure and conflict.

Thinking in Culture: Some Concerns

Communication between any two people is made possible by the sharing of common language and the use of common referents. But there is nothing intrinsic in the meaning of the language or in the meaning of the objects. When communication occurs, a process we could call "symboling," an agreed upon game is being played.

In our society the fragmentation of children from adults and from the Establishment, from the physical environment and from long-range spiritual identification must surely begin because the symboling process has become individualized or personalized. The theoretical and qualitative interpretants between factions must differ. The continued fragmentation of minorities from the mainstream of education must surely be based in the absence of shared symbol interpretant-referent systems. Compound the problem with the need for a qualitative analysis of programs that must be shared between alternative groups, and the problem gains in proportion.

The unilateral expectations that emerge in a one-mother system would be alien to a Hopi child where language in its earliest symbolizing stages precludes an isolation or an insulation of himself from others in the society or things in his environment. (10) The diffusion of the referential system from a single interpretant base helps give the Hopi child an identification with everything and everyone.

As the symboling process becomes more complicated, the symbols and possible interpretants multiply, the child extends his repertoire of descriptions, functions, and definitions.

The possibility of a child's intensified discriminations allows him to reach into his bag of options and clearly locate the most appropriate figure for the symbol he's employing. Then the symbol working through the definition or interpretant locates an object; the connection between the symbol and the object becomes quite firm.

A child's cognitive pattern could be described in terms of the

way he most frequently uses a symbol in the presence of an object. Each culture will prescribe within a range the most appropriate way the connection can be made between symbol and object. This then describes the way in which a symbol expands in terms of the culture but rarely in spite of it.

This description refers to the different kind of symboling that is learned by children, which was identified earlier as the qualitative process or "silent language," where a child imitates and adopts a behavior pattern or style without concern for the representational status of the behavior as eventually measured by tests in schools. The use of a dialect by a child often in the face of severe criticism illustrates this presentational kind of symboling. A symbol now presents itself in its meaning.

Each culture has its own pattern of "symbol to thing" connections and though it may omit some of the "things" or some of the connections, the connecting process itself persists in all societies. Hence in the absence of symbols, there is an absence of human-ness.

Each culture could be examined, then, in terms of some generic categories. The categories (ethnoscience) can be used to unify or differentiate one cultural syndrome from another and yet demonstrate a common formal basis. For instance, the following categories fit all cultural patterns: language, space, objects, and "noise".

RE: Language -

A mother explaining to her son how to get change from a purchase is giving him a symbol system which would be called rational. Yet by having her arms around him and using an affectionate tone of voice, the child is learning about the nature of qualitative symbols, warmth in orders, in his culture.

RE: Space -

An Anglo man visiting a Latin American man might find himself uncomfortable and continually physically backpedaling in the course of a conversation. This difficulty could probably be explained by the differing uses of social distance. Even in an Anglo society, an intimate group is defined spatially and the intimacy diminishes in direct proportion to the distance between the members.

RE: Object -

The placement of objects and the wearing of certain clothes may both be considered part of something when deliberately established -- which could be called a silent language or a hidden communication system. The clothes of the Amish, the hair of the hippie, and the gray flannel suit of Madison Avenue each silently speak of a value that is held.

RE: Noise -

A noise symbol is one that carries meaning in spite of and often in contradiction to the stated purpose of a communication. Jules Henry has made this point especially well in "American Classrooms: Learning the Nightmare".

The symboling process is compounded initially by the presence of more than two participants. This is true mostly because of the compounding of the possible variables in the situation and the multiplying of the interpretative systems (individuals) used to sort the variables.

It should not be surprising to note that in adding to some marginal number of communicators between two parties that communication becomes easier. The presence of several individuals increases the difficulty of communication, in the absence of a directing agent, as opposed to a one-to-one exchange. However, when the exchange is between one and a great many, something called mass communication renders the task of communication simpler.

The symboling process that probably accounts for these stages of communication difficulties are: the transfer of shared symbols on a one-to-one basis supports spatial, language, and noise linearity; and the transfer of any uniform meanings decreases up to the point that the mass mentality emerges. Individuals at this point have lost their ability either to be heard or to be effective. They can act en masse, sacrificing their individuality on most issues to gain complete agreement and uniformity of purpose.

It would seem possible to describe different cultures in terms of the above sequence. People as they come together in large groups must sacrifice some things for other things. In a Hopi society this indeed is what has happened. We could describe them as having given up their individual goals for group cohesion.

The communication problem must gain its major audience in the

effort to educate. The ideas of groups in conflict or in concert must make us alert to the change in noise patterns between groups as well as to the more general issue of how theoretical and qualitative goals are used in curriculum construction.

Some General Educational Implications: Alternative Assessment

We should now explore some of the specific implications of some of the issues developed in an earlier part of this paper in terms of educational assessment. Initially, there are certain problems which should be listed:

1. Confusing a symbol with what it represents. Children must be confused when in their literal phases someone says: "it's raining cats and dogs". Surely the child who has learned to read must see either cats and dogs falling or the words "cats and dogs" falling. If adults were this literal in our society, the confusion would lead to an asylum. How many children from different cultures must hear everyday Anglo teachers say things to them that must seem absurd?

2. A shared symbol becomes shared when two symbol users refer to a common object with a shared interpretant or definition. When a teacher can be said to be communicating with a student, she may merely be sharing theoretical symbols and their referents. If the participants are vague about the symbol-interpretant-referent patterns, shared meaning will suffer.

"...if a child does not understand the meaning of the oral symbols or if he attributes a different meaning to the oral symbols than that attributed by the teacher, he may never acquire the social convention, the technical skill or the perceptual framework which the teacher is intending to transmit..." (John Chilcott: Issues in American Education, p. 73)

The assumption must be made for symbol functions, from the definition of symbols for this paper, that a symbol is equal to imminent action. Whenever the symbol does not produce an action, it is likely that no action is possible due to the inadequate connection between the symbol and an action sequence.

When the student engages in an action inimical to the symbol, it must be assumed that the student has either imposed another symbol on the symbol used or he is hearing a qualitative symbol and responds to the "noise" factor and not the theoretical message, to the massage not the message.

3. Once the interpretants are clearly tied to the appropriate referents, any misunderstanding or mis-education must be a function of a value disagreement and not a communication error. A teacher who now understands the nature of a taboo, sees the interpretant-referent connection, and persists in its violation, must be in a value argument with the taboo itself. She has substituted another goal for the goal of clarity. For example, the continued pointing at a person in northern Sonora after the vulgarity of the gesture is explained is evidence of a value rejection. In The Navaho (Kluckhohn and Leighton), there are many examples of taboo structures which insure misunderstandings between students and teachers.

"Death and everything connected with it are horrible to the People. Even to look upon the bodies of dead animals, except those killed for food, is a peril." (p. 192)

"...all ailments, mental or physical, are of supernatural origin. The notion of locating the cause of the disease in physiological processes is foreign to Navaho thought." (p. 192)

"Disease...is the result of violation of a taboo or of attack by one of the Holy People, a ghost, or a witch." (p. 192)

"Coyotes, bears, snakes, and some kinds of birds must never be killed." (p. 201)

"Any kind of sexual contact (even walking down the street or dancing together) with members of the opposite sex of one's own or one's father's clan is prohibited."

4. A child will usually resist a theoretical symbol pattern to the extent that he separates the process from his own qualitative purposes. However, it is quite another matter for him to resist the qualitative onslaught of his culture. He cannot usually articulate the "silent" impact and only rarely does he ever become deliberate about this process. For example, a group is recognizable by the qualitative pervasive which

characterizes it, the unity in its silent language, and the shared hidden social agenda. The identification of this silent language and hidden agenda by teachers would increase the likelihood of care and nurture in the development of a curriculum for certain groups of children. Combine the hidden agendas or the silent language most of which are employed without deliberation and is it any wonder the minority child is mistreated and the teacher pleads for help?

5. Multimedia bombardment has been a recent innovation to promote theoretical learning: representational symbol building. The issue is neglected that the media themselves present a pattern which can be cherished and taught.

6. Assessment of qualitative skills or even the process or style with which a child thinks, has only recently produced a need for clarification of the what that is to be assessed, the norms to be used, and the dangers of continuing to evaluate all cultural bases from instruments designed to test for theoretical symbol understanding.

What then can we do about symboling as it applies to thinking, cultures, and alternative assessment?

Symboling comes in many guises. Thinking could be loosely identified with the processing of judgments or decisions. Different cultures place different emphases on different kinds of symbols.

Thinking style can be located in all cultural varieties.

Assessment must provide analogical tools by which to cross cultural boundaries and help draw correlative inferences between different kinds of cultures.

When, for example, a Black girl takes care of her 8 brothers and sisters, handles the shopping for the family, prepares the kids for school, meets the various emotional needs of her younger siblings, we tend to think of her as a responsible child. Yet, when she flunks her math class test, gets a low score on her I.Q. test, and is generally un-academic, we think of her as hopeless.

The leader of a Chicano "gang" is probably not going to make it through school. His language is not very clear in either English or Spanish and he has a record of academic failure. He is viewed as "unintelligent" and becomes a school dropout.

What can we do to identify the basic problem?

I.Q. tests, achievement tests, and other instruments of evaluation are patently inadequate. Many efforts to find equitable means for evaluation have recently been made. the B.I.T.C.H. test, (11) for instance, is designed to assess the vocabulary of Blacks in terms of their cultural awareness in a way parallel to the use of vocabulary assessment of Anglos based on Anglo culture.

For example, the word "pick" is used in place of "comb". An Afro haircut would not need a comb. This Black Intelligence Test of Cultural Homogeneity is a plea for an equal chance in the game of evaluation. According to its author, "a child who knows Malcolm X's birthday and the date of his assassination shows as much intelligence as the child who knows Washington's birthday". This test, then, wants to make the language of educational evaluation attentive to the cultural syndrome of Black culture.

Another attempt to produce clearer test results for minorities is the A.B.I.C. test of Mercer and Lewis. These investigators have tried to find a way to differentiate the mentally handicapped child from the minority child who merely tests as a retarded child. "Adaptive behavior was conceptualized as an individual's ability to play ever more complex social roles in a progressively widening circle of social systems. (12)

The main point of the A.B.I.C. seems to be to compare the normal distribution curves of children in their own cultural habitat to the normal curve of the open society on items drawn from the open society.

If a child scores low on the test designed for his own system, he is probably mentally handicapped. However, if the child scores high on the test based on his own system and only normal or low on the open social norms, it can be assumed that he is quite bright and even gifted. The problem is ours as teachers.

These new tests are referred to here to indicate the emerging concern for children's school evaluations. They also point up two other more devastating questions:

1. Are we clear about what "norms" mean and how they must be clearly used in all written materials evaluating students?
2. Are we clear about what measurement means in

terms of differentiating content items (13) and abstraction skills, models used in constructing measurement instruments and models for identifying thought patterns? (14)

The need for alternative assessment must lead us eventually to an understanding that all people can be located by their style of thinking, their habits of processing ideas.

While this may be only one more heuristic myth, it is an effort to point out that the symboling process does not differ between different cultural groups of people, nor by age or education. The variations seem to occur in the kind of symboling that persists in each group or is used predominantly by individuals. (15)

In a brief way, then, symboling to thinking can be seen analogically as function to design. Thinking is related to culture as design is to characterization. Culture has the analogical connection to alternative assessment that characterization has to qualification. Symboling, as the definition of man, implies a need to evaluate man by the range and level of his symbol usage. (16)

Now more than ever before, we need ways of identifying and teaching these extended symbol meanings. Now, as never before, we should not define man as a symbol user. Man should be seen as identical to his usable symbols. He is his plans. He is his way or his style of symboling.

Documentations

1. See Charles Morris' Writings on the General Theory of Signs. New York: Humanities Publishing Co., 1971.

2. While it is not in the scope of this paper, the problem could be raised as to whether or not the distinction between signs and symbols is a spurious one. It could be held that no signing animal can symbol and no symboling animal can sign; i.e., man can only infer signs in the presence of symbols.

3. The gerund form of the term "symbol" is preferable to the noun designation inasmuch as one can check the results of an action stated in gerund form, while a noun form generally produces reification or hypostatizing.

4. Readers dedicated to an indepth analysis of symbols should see "Theory of Signs" in Collected Papers of Charles Sanders Peirce. Edited by Justus Buchler, Harvard University Press, Cambridge, Mass.
5. Emotion: A Philosophic Analysis by T. Frank Saunders, 1964, Brown and Company, Dubuque, Iowa.
6. The Silent Language by Edward T. Hall, Doubleday and Company, Garden City, New York, 1959.
7. Nonverbal Communication by Jurgen Ruesch and Welden Kees, University of California Press, Berkeley, 1956.
8. "Violations of Human and Civil Rights: Tests and Use of Tests," Report of the Tenth National Conference on Civil and Human Rights in Education. National Education Association, 1972.
9. The model used to present the meaning of symbols in this paper is borrowed directly from the writings of T. Frank Saunders. For specific references, see Emotion: A Philosophic Analysis and The Proceedings of the Far Western Philosophy of Education, 1964-1973.
10. It must seem strange to us that the Hopi has no word for "future," "enduring," or time in general; not even his grammar has a future construction. Yet implicit in his ability to refrain from future reference is the goal (all goals are future tense) to not attend to that which might fragment him from others in his group.
11. "Violations of Human and Civil Rights: Tests and Use of Tests," Report of the Tenth National Conference on Civil and Human Rights in Education. National Education Association, 1972, p. 17.
12. Taken from an unpublished pamphlet by Jane R. Mercer and June F. Lewis entitled "Adaptive Behavior Inventory for Children," 1972-73 Standardization Edition.
13. It should be pointed out that it is never adequate to respond to a vocabulary item with a definition of the usage for the word. The classification of the term in a generic frame is the issue. Abstraction skills get the best score.
14. Colleen S. Decker and T. Frank Saunders, "Some Theoretical Considerations of Measurement: A Philosophic Analysis," Proceedings of the Far Western Philosophy of Education Society. Pomona, California, 1972.

15. T. Frank Saunders, "A Think Tank Approach: The Problem of Judgment Stylization," Proceedings of the Far Western Philosophy of Education Society. Anaheim, California, 1969.

16. Dorothy Davis and T. Frank Saunders, Thought Stylization: A Pattern for Thinking. Tucson: Farmington Press, 1973.

SECTION XVII

READING AS A SEMANTIC AND EPISTEMOLOGICAL PROBLEM:
IMPLICATIONS OF CERTAIN BASIC ASSUMPTIONS ABOUT THE NATURE OF READING

· JOHN B. CONNELLY

I

Learning to read is often viewed as analogous to learning to decode a secret message. The message is there. All one has to do is translate the mysterious marks into their verbal meanings and reading has taken place. To teach a person to read is to teach him to decipher the code. Thus it is reasonable to teach this person the sounds which letters and combinations of letters stand for, to teach him to pronounce words, and to have him practice by reading aloud. Subsequently, he will continue his reading practice by reading to himself.

The complication soon arises that the learner may come across a word which he not only has not learned to decipher -- but whose deciphered meaning he doesn't know. For such a contingency there are a number of possibilities, of course. One may try a dictionary, guess from context or ask a friend. A more difficult problem arises when the meaning is beyond the understanding of the reader. In such a case, the reader, if he is interested, may seek out some appropriate experience. Indeed, an extensive part of the justification of many of the subjects studied in school would seem to be the facilitation of concept and vocabulary development in specific fields by means of focused experience.

Such a brief discussion of learning to read may seem so oversimplified as to be quite misleading. Yet, on due consideration, it does seem to cover the essential points of many a reading lesson. This approach shall be called the "semantic" method of reading instruction. It is an important problem in of itself, and teachers may be largely excused, if in their really enormous effort to accomplish this goal, they never have much time for what might seem at the outset a peripheral concern -- the "epistemological" goal of reading instruction.

II

By epistemological goal is meant the use of written materials to obtain a knowledge of something. By knowledge nothing grand or intimidating is intended, but simply the rather work-a-day notion that now you know something that you didn't know or understand or remember before you read whatever it was you did read. Or at the very least, something like this was occurring when you were actually reading. It makes no difference whether one is reading a mystery by Mary Stewart, The Evolution

of Physics by Einstein and Infeld, or Our Beginnings in the Old World, a seventh grade California world history text. If reading were going on at all, there must have been some degree of comprehension, some communication taking place, some development of knowledge about what was being read. For very few people would consider reading to have taken place if a person had merely formed the sounds, much as a totally non-Spanish speaking person might be taught to phonetically pronounce a Spanish text.

So it must seem very odd to say that the epistemological goals of reading instruction can appear to be of peripheral concern, if reading can't take place without them being accomplished, at least to some degree. This strange result happens for several different reasons. One is that such a goal may be felt to be reached automatically, so that valuable time need not be squandered working toward it. A second possibility is that in the maddening rush to teach ever different concepts, vocabulary and courses, there simply may not be time or energy available to worry much about anything else, other than the superficial learning of new words. Gilbert Ryle was addressing this problem when in The Concept of Mind he wrote that the job should not be to increase what we know, but to "rectify the logical geography of the knowledge which we already possess". A third possibility is that epistemological concerns are more subtle and involved than a cursory examination of the matter would uncover and, therefore, they are likely to be passed over unless deliberately and extensively explicated.

None of these three possibilities should be viewed as specious. Each not only is relevant to the situation, but what's more, each, to some extent, is a justifiable opinion. In the initial stages of learning to read -- stages which many children never progress very far beyond -- a degree of comprehension usually does come about automatically. This is probably because of the vocabulary level, conversational type of dialogue, commonplace type of relationships and the lack of effort needed to follow the themes. At this level what pupils read is closer to common speech patterns than what they will face later on in school. Thus the comprehension skills learned in verbal communication will often suffice to make what is read intelligible. In later life this would also hold true with the reading of popular novels, magazines, and newspapers. Hence the main job of the teacher appears to be a seemingly endless attack on the "semantic" aspect of teaching reading.

For a variety of reasons schools usually do attempt to cover a multitude of subjects rather than really dig into a few. The results of this are manifold, but one stands out for our purpose -- the amount of material to be read mitigates against much of a concern with epistemological considerations except on the lowest level as each teacher

must forever scramble to try to get across the basic vocabulary and concepts of his course. To be quite honest, many teachers in the public schools are barely able to attempt even this goal since they get bogged down with really basic reading problems when pupils are continually passed on to them who cannot read the assigned material with any but the lowest degree of skill -- and often not even with that. Thus many teachers become locked into a concern with the "semantics" of their courses and have no energy left for what they may think of as a desirable step two -- comprehension and understanding which is to be gleaned after the vocabulary is learned.

The third reason is cogent because an epistemological analysis of the reading process not only involves a certain amount of effort, but more importantly, it requires a viewpoint from which to begin and a framework by which to be guided. This is tantamount to asking each teacher to develop a coherent theory of knowledge and expecting him to apply it in his teaching behavior. Such an expectation is not unreasonable, in fact it is a most desirable goal, but it will not be commonly fulfilled if left on a laissez faire basis.

III

To provide such a viewpoint and framework it is necessary to discuss the concepts of order and structure. Consider these three groupings of the same five words: "Napoleon succeeded brilliantly at Austerlitz," "Austerlitz succeeded brilliantly at Napoleon" and "Austerlitz brilliantly at succeeded Napoleon". The first two adequately illustrate the point of the importance of order, but the third is rather more intriguing. Why? Because it seems that order is not only necessary to a specific meaning, but to any meaning at all. But where is the locus of this meaning? To someone who knew no English or to the proverbial man from Mars, all three examples would be equally meaningless. The meaning must, to some extent, be a function of the reader; that is, he is able to make sense out of (or, perhaps, put sense into) some arrangements, but not out of or into others. Or, put another way, he has learned that certain words in certain orders can be evaluated as having various meanings, while these same words in some other order cannot.

Another aspect of the problem of order lies in what may be called the linearity of language. An apt analogy is to imagine two deaf and dumb men on opposite sides of a wall with only a small opening through

the wall, not large enough to see what is on the other side, just large enough to be able to pass through rather tiny objects. One man has an assembled jigsaw puzzle which he wants the other man to see, to enjoy and perhaps to study its particular structure and specific relationships. The opening is no larger than the largest individual piece of the puzzle. Thus, the original owner, who can ostensibly see the entire puzzle, can only communicate it piece by piece, although he can attempt to transmit the pieces in some order which will facilitate the other man putting it together. For instance, all the top edge could be passed first or at least adjacent pieces. But how would the receiver know they were the top edge? And later, when more pieces had come through, how could he ascertain the relationships of the later orders of pieces with the earlier? And, if by chance, there were several possible relationships, how could he determine the intended ones? It is possible to imagine an outcome where the puzzle never is put together, but only a haphazard series or arrangements of bits and pieces have come into being so that the end result is more like a table top covered with partially, perhaps randomly assembled potsherds, rather than the integrated mosaic that was intended by the sender.

The problem of order thus develops into one of the relationships among orders. It becomes a problem of the structure of many parts as they relate to one another and to the whole they constitute. A map is such a structure. A map is a structure of ordered relationships, such as Dresden being west of Warsaw and east of Paris. A map may also indicate regional climates, size of cities, political divisions and a great variety of topographical features -- all being kinds of relationships. The coherence of the entire map resides in the relationships of the individual bits and pieces of which it is constituted.

The analogies are, however, somewhat misleading in that they simplify the problem in at least two crucial ways. Words or concepts do not fit together nearly so neatly as jigsaw puzzle pieces or elements of a map, nor do most chapters or books present so clear and unencumbered a pattern as either a puzzle or map. Secondly, a chapter or book cannot be spread out so that you can see the whole thing. In terms of the analogy it is as if the receiver can never get all the pieces in his visual field at once, because there is a limit to the number of pieces he can have on his side of the wall. For each new piece he receives, past a certain number, he must pass one back. So that he must build his structure from those pieces he sees and those he can remember.

Summary

The puzzle and map analogies give several insights into the reading process. They illustrate the difficulties a reader must labor under, and they point the way to an understanding of the basically epistemological nature of reading. For the reader cannot simply decode words, although he must be able to accomplish that. He must put the meanings of the words together. He must decode the relationships and structure for which the sentences, paragraphs, and chapters are only symbolic representatives.

Therefore, as E. L. Thorndike once mentioned, "Reading is reasoning". It is up to each individual reader to abstract what he can from the material and to reconstitute a mental map. He must integrate the bits and pieces he has gleaned into a meaningful whole. As the English psychologist Stout would have it, the individual must achieve "a progressive explication of detail in an implicitly apprehended whole". Reading is a personal process of creation in which each reader must take the symbolic elements presented to him and manipulate them so as to develop a mental mosaic of apprehended relations.

Conclusions

The "semantic" approach is misleading from the start. It is essential but not sufficient. It is marginally effective only because most individuals normally try to make sense out of their experiences, i.e., they have a functioning epistemology. And even this marginal effectiveness vanishes and the approach becomes contra-productive once basic reading has been mastered, because it tends to occlude any insight into the essential nature of reading -- the abstraction of relationships and structure.

For somewhat similar reasons we must look askance at the reading of subject matter as primarily a "semantic" exercise. If the point is for the student to come to grips and, hopefully, master those relationships and structures specific or peculiar to a given subject, then an undue concern for bits of vocabulary and individual relationships learned in isolation is both misleading and largely inefficacious. It is misleading because all involved, students, teachers, administrators and public, may feel that the proposed goal -- the learning of the subject -- is being accomplished. It is largely inefficacious because the goal simply cannot

be reached by such methods -- no matter how many pages are assigned as homework or how many work sheets are filled out or how many tests are administered and grades assigned.

The question of testing is of singular importance because of the insidious effect of the type of test upon the learner's concept of knowledge and his idea of the nature of reading. We must abolish much of our current testing methods which aim at fishing for the recognition of specific relationships. This is for two reasons. If we are serious about the internalization of structure, then recognition simply is not good enough. The more cogent reason, though, is that our tests must aim at elucidating whether a whole structure, or at least significant parts of it, have been understood, not just unrelated bits and pieces and catch phrases memorized. Since the reader, if he has truly read, has reasoned the elements of the text into a coherence, then the only viable test will be whether he can do so.

If once a person has thoroughly read an article or a book, if he has constructed a mental map through which he can travel with ease and certitude, if he can pass the most exhausting test concerning the content of the text, is he then through? Is there no more to reading? It is, to be sure, a matter of definition, but there are questions concerning the logical coherence of the structure, and, if it is appropriate, its correspondence. Might we not form a moral, esthetic or scientific value judgment of the material that has been read? Might we not use the mental map as a source from which to generalize or infer or predict? In short, is thinking about what we read also a part of reading? If it is, then to that additional extent do our schools fall short of a complete teaching of reading?

Part of our frustration about our failure to teach reading is due to a lack of appreciation of the difficulties involved. The job had seemed so easy; the way so straightforward. Teach phonics and vocabulary! Ridding ourselves of this lack of awareness will not ipso facto solve our reading problems. There is no simple way to avoid problems of native intelligence, motivation, and social and familial background. But for those who believe that reading is an important skill and that the understanding of subject matter a valuable goal, a clearer understanding of the reading process will go far toward a more fruitful approach to the teaching and learning of both.

SECTION XVIII
TEXTBOOKS AND TEACHING DEMOCRACY:
POLITICAL EDUCATION AND INDOCTRINATION

LAWRENCE W. BYRNES

The idea of "teaching democracy" has a long and honored place in American educational history. Indeed, there seems to be little controversy about whether we should teach democracy in a democratic society. Disagreements arise, however, about what constitutes a democratic society or what it means to teach democracy.

Among the many tools used in social studies classrooms to teach democracy are textbooks. Although not speaking for themselves, they can and are used by teachers as sole means of informing students about the idea of democracy. Necessarily, whatever the texts' commentary on democracy, the teacher is usually the primary interpreter of the text for students. That being the case, my remarks about textbooks and teaching democracy should be seen as necessary but hardly sufficient to cover the subjects under discussion in this session.

In studying textbooks for commentary on the term "democracy" I proceeded as follows:

1. I attempted to discover some statement or statements which indicate the goal, purpose or intent of teaching democracy.
2. I attempted to discover the expressed content of teaching democracy; that is, statements about the nature of democracy.
3. I reviewed teacher editions or guides or manuals for statements about the proper teaching methods to achieve the intended goal; that is, teaching democracy.

In short, in the text studied, I asked the following: (a) What are thought to be democratic values and what conceptions of democracy are postulated? (b) What materials are thought to be most appropriate for teaching democracy; i.e., pamphlets, stories of great men, field trips, movies, democratic experiences, and so on? For the purposes of this paper I will confine my remarks in this area to the use of "democratic experiences". Given the time limitations of this session I will reduce my review to the following six volumes of the Harcourt & Brace Series entitled The Social Sciences, Concepts and Values. In volume one of that series the expressed goal for children is rule-governed behavior. Children are expected to recognize, with the help of the teacher similarities and differences in humans and the need for interaction and cooperation among people. Indeed, individuality is to be achieved through such interaction and cooperation. Children are asked to use rational decision-making in

solving human problems with an emphasis upon the use of rules in the resolution of conflict. Children read that: "Rules help protect people's health and safety". Suggested activities to promote this idea include discussion of the possible or probable consequences of a classroom or home without rules. From rules there is a quick transition to laws. Despite the absence of explanation for such transition the teacher is to teach that: "In a democracy, citizens help to make laws. Each citizen must not only understand and obey laws, he must also help to make laws".

In volume two of the same series, there is a continuation of the emphasis upon recognition and acceptance of diversity in customs, governments and culture generally. Examples of such diversity are: "Some people sleep in a bed, others in a hammock, others on a mat on the ground; some people are born in a hospital and others in a forest. None of these customs is better than the others; they all are proper in a particular culture, and should not be judged as 'good' or 'bad'. A particular custom, however, can be studied as to whether it is effective or ineffective within the society it operates. Social scientists find this kind of 'judgment' more helpful in understanding cultural dynamics". The obvious problems associated with this cultural relativist view will not be treated in this paper.

Volume two continues the volume one emphasis upon rules and laws. The authors do add a cautionary note to teachers about treating rules and laws external to the "realities" of American society. "The teacher... should not...shelter the young child from political realities. The child is to understand the reasons for laws and how they come about. He comes to understand that the purpose of government is to serve the people -- not the other way around -- and to enable them to live together in peace and to work together, individually and as a group, to gain a good life."

Indeed, the child is to taste these political realities by practicing democracy. For example, teachers are given the following suggestions: Children are to devise rules, consider problems and debate issues. For example, they could discuss the following question: "Should each child decide whether or not he wants a rest period after lunch, or should the teacher decide for all?" The teacher could also be asked the following: "Who may decide what the class will play? Once divided opinion has been kindled, the teacher should encourage the children to discuss their differences, making it clear that such discussion allows them to influence the majority viewpoint." "...the children can learn that a democracy will fail if the group members establish ineffective rules and laws, or if individuals in the group are unaware of these rules or fail to obey them." Although these attempts at simulating direct democracy using

issues relevant to second grade children, the procedures are hardly analogous to Athenian direct democracy or contemporary American political practice.

Interestingly, in none of the six volumes I studied is there mention of important institutional issues related to the school or schooling. For example, in studying the characteristics of democratic institutions, one might have youngsters make an assessment of their own school. Questions of authority, power, rules, laws, participation and so on could be handled within this context.

The six volumes do emphasize problem solving, debate and controversy as proper in a democracy. However, the problems to be solved, the debates and controversies to be considered are confined to students. There is no mention of disagreements with teachers, value conflicts with teachers or resolution of differences with teachers. Teachers thus become objective, impartial, non-participating members of the class and school; at least in terms of the issues pertinent to students.

In all volumes majority rule is presented as necessary in a representative democracy. Although this is qualified by recognition of dissent as a right it is evident that the latter is secondary to majority rule. And despite claims that one should respect diverse customs and traditions in societies in which they work, democracy is still promoted as that form of government and human association in which "...citizens have the greatest opportunity to have their values put into action by their government". Unfortunately, the authors do not inform the teachers that "effective" itself is a value laden term, and that children using "effective" as a criterion are making judgments about customs and traditions.

Heed the following statement second graders: "In a large representative democracy the loner has a right to be alone, but he may not be heard. His influence grows as he becomes one of many who have like views." Surely, the authors ought to inform the teachers whether this is a description of the United States or a prescription to be followed regardless of the nature of American society.

The strength of the series is in sections that encourage students to analyze slogans and differing interpretations of historical events. For example, students are asked to assess the meanings of the following statements: "The gunfire killed five men," and "The redcoats murdered five patriots." Here the notion of critical thinking and analysis is given considerable credence.

Unfortunately, the notion of critical thinking is neglected when the authors tell the children that: "Democratic government conflicts with authoritarian forms of government". Perhaps there is no need to tell children such information as it is inferred throughout the series. If the authors do deem it necessary, then the same standard of critical thought ought to prevail in this situation as in others throughout the series. Alas, it does not. This "telling" approach is continued when the authors finally and explicitly champion representative democracy. "We hope that they (children) will come to be committed to this basic American value because they understand it and deeply agree with it." To come to this point in their thinking children are asked to draw pictures of themselves doing something that the "Bill of Rights allows you to do". Volume three presents the child with his first definitions. Direct democracy is defined as government where every man can give his opinion and can take part in each decision by voting. The New England town meeting, in this as in most other texts, is the paradigm case of direct democracy in the United States. Representative democracy is portrayed as a large form of government for large groups, in which the voter chooses people to act for them. Students are supposedly aided in making the distinctions between direct and representative democracy by investigating the following question: "If you elect class committees, are you practicing direct democracy or representative democracy? Relationships between these types of democracies and values is suggested but it is unclear whether democracy itself is considered a value. The authors do define a value as "...to like or think well of people or things". A value conflict is described as "...arguments between people in a community who do not have the same values". People who want to build new houses may have a value conflict with people who want park land instead of houses. Do you know of a value conflict in your community?

Volume five furthers discussion of representative democracy, with the inclusion of the United States Constitution, the notion of separation of powers, the federal system, and the resolution of conflict. This frame of reference is designed to help the child learn increasingly to:

1. Explain his own views of the strengths and limitations of giving power to democratic governments.
2. Recognize and explain the consequences of a government's requiring uniformity of values in its citizens.
3. Describe his ideas of evidence of loyalty and the relationship of loyalty to agreement.

4. Recognize and explain in his own words that belonging to a group does not guarantee protection of an individual's rights and values.

This volume appropriately and effectively places these knowledges, skills and attitudes within the context of American history. For example, historical events are used as a reference for the following questions: (a) What limits should a democratic society place on fundamental civil liberties such as freedom of speech, press, and assembly? (b) Who should decide where the line should be drawn? (c) What guideline should be used?

The authors lead both teachers and students through American history to an ever democratic United States. Children are encouraged to continue this trend by acquiring citizenship skills appropriate for a democracy. For example, children are asked to acquire the following skills:

1. Analyzing a problem.
2. Finding out what others really think about it.
3. Organizing groups for discussion, planning and pressure.
4. Meeting with other groups to settle on action which seems most suitable to all.
5. Analyzing the ways decisions can be made and getting in touch with the decision-makers.
6. Evaluating the final decision, and if necessary, trying to change it or have it modified.

Specific activities through which children will be practicing democracy include: Gathering in small groups and planning a way of governing that children think meet common needs and deal democratically with differences in values. Of course, the authors have provided that form of government before the activity is initiated; namely, one which deals democratically with value conflicts. Children are also asked to draw pictures or collect photographs of people performing citizenship skills or learning about citizenship skills.

Volume six attempts to gather the knowledge, skills, and attitudes hopefully acquired in previous volumes and encourage students to

recognize characteristics of a democratic society. For this purpose a series of guiding questions are posed.

1. In the form of government under consideration.
 - a. Who votes?
 - b. What kind of elections are conducted?
 - c. Is there a representative legislature?
 - d. Is there a jury system?
 - e. Are there political parties? how many?
 - f. Is there a system of checks and balances?
 - g. How does the government actually work?
 - h. Who usually gets elected?
 - i. Who really does run for office?
 - j. Does one party usually win all the elections?

These six volumes take the child from his local environment to a national and eventually international setting. In each setting the child is to be given the knowledge, skills, and dispositions characteristic of a democratic citizen. He is also asked to judge other cultures and nations according to these criteria.

In closing I would like to offer my conception of a democratic citizen and one which I hope is more frequently seen in textbooks designed for producing democratic citizens.

The democratic citizen as a morally autonomous person and moral agent in his public role understands the principles of democracy, is committed to live in accordance with them, and possesses both necessary knowledge and skills for concretizing that commitment within the world in which he acts.

197/198

SECTION XIX
VALUE CONSIDERATIONS IN THE SCIENCE EDUCATION

ROBERT BRUCE MCLAREN

When the French chemist Lavoiser, was sentenced to death by the Revolutionary Court (1794), the judge waived aside the defense's plea to spare a great man of science declaring: "the Revolution has no need of scientists". Science was regarded as morally neutral, uninvolved, and therefore irrelevant. If its practitioners were out of step with the aggressively moral concerns of the Revolution for "liberty, equality, fraternity," they must suffer the consequences. Today, after nearly two centuries of growing involvement with social and cultural affairs, there are again signs of disaffection though now for very different reasons: science is being blamed for a runaway technology, environmental pollution, and enhancing the horrors of modern warfare. The question now before us as educators is whether it has become not merely appropriate but mandatory that science education include moral and ethical concerns in the curriculum along with the essential cognitive subject matter and development of laboratory skills.

I

Contemporary men of science, like all other citizens, have been born into a world without their consent, encountering chaotic conditions of warfare, ecological imbalance, and the irrational behavior of their fellows. No less than others they are concerned with the question of values, and they ponder whether science itself may be a source of values, or if it is only instrumentally valuable: not good or bad in itself, but useful in acquiring other things or goals. Some agree with Einstein that the whole question of values lies outside the domain of science, that "science can only ascertain what is, but not what should be". (1) For such men, values must be sought in the realms of religion, art, politics, etc. Others insist that nature is our only source of values, and that the task of science is to clarify the needs of mankind and the hierarchy of values which the natural environment provides in relation to those needs. Still others claim that nature is merely a term for value-blind forces, and that man (whom H. G. Wells referred to as "nature's bastard,") deals in illusions when he seeks values at all; even survival has no ultimate meaning in a dying universe. The notion persists in other quarters that the cosmos must be considered as psychic in nature (from Plato, to Leibnitz, to Chardin), wherein purpose can be discerned in the very patterns of evolution and creative adaptation. Elsewhere, the mechanists (from Democritus and Lucretius, to Bridgeman) would agree with Stace's description, that "the world . . . is purposeless, senseless, meaningless. Nature is nothing but matter in motion. The motions of matter are

governed, not by any purpose, but by blind forces and laws". (2) Still others see no contradiction in affirming that while the idealists may be wrong about Purpose being resident within the fabric of nature, and the mechanists may be right about the composition of nature being lifeless and value-blind, nevertheless science can disclose a source of values in the natural processes, which afford mankind a sufficient moral and ethical system for his life.

While it seems painfully gratuitous, we are forced again and again to re-assess and clarify the nature of the scientific endeavor. Thomas Huxley is reported to have asked, "What is scientific thought but common sense well regulated?" (3) But Francis Bacon pointed out long ago that common sense is a most uncommon commodity, and notoriously unreliable. Errors of thinking arise all too easily from what he called "Idols of the Mind," those predispositions to judge everything in terms of one's personal experience, tribal customs, fads and fashions, and the clichés of the market place. (4) In the realm of values, common sense is based so much on a mixture of fact and prejudice as to be "imitative...vague and ambiguous, and superficially grounded". (5) Furthermore, many of the most important discoveries, from the roundness of the earth, to its location in the solar orbit, flew in the face of "common sense" and cost some scientists their lives. Oppenheimer points out that contemporary nuclear physics is the product of very uncommon sense at work in a highly theoretical discipline. The now familiar conundrum of the nature of the electron, which appears wave-like under some circumstances, but corpuscular under others, prompted Oppenheimer to note: "ever increasing refinements and critical revisions in the way we talk about remote or small or inaccessible parts of the physical world have no direct relevance to the familiar world of common experience". (6)

Centuries ago, Socrates complained that "common sense" should have revealed to Anaxagoras the folly of attributing causality to "things like air, aether, and water, and a host of other absurdities" instead of Mind. (7) Yet many men of science since Anaxagoras have sought the cause of things, including values, in the realm of nature. Some would further limit the field to nature mechanically interpreted. Socrates' error was in applying only deductive thought to the problem, and having assumed Mind as the first cause, was unable to contemplate alternatives with any degree of hospitality. Scientific method has, since Aristotle, required a combination of inductive and deductive processes, by which observation, experiment, and the developing of hypotheses, are followed by whatever deductive "proofs" seem appropriate. To be sure, Aristotle was often in too great haste to classify his data without following this procedure, and the inductive method failed to gain sufficient usage until the 12th century.

After Galileo, Newton, and Descartes, scientists became more sure of themselves, each successful experiment and discovery reinforcing their confidence, and discrediting older authorities as well as common sense. By the 19th century, there was a general aplomb among scientists; they knew what the world was really like, and there was a satisfying finality about the concepts and theories of science which would soon enable them to explain everything in terms of matter and energy(!) If Reality consisted only of minute billiard-balls of some 90 different sizes randomly colliding, rebounding and attaching themselves to form the stuff of our familiar world, there were no metaphysical concerns to be entertained. Values were wholly of the individual's or society's choosing, and the ultimate frame of reference for such matters must be pleasure and/or the dominant will and superior force. Nietzsche proclaimed that God was dead, and Swinburn sang "glory to man in the highest, for man is the master of things".

II

The 19th century model of the mechanistic universe, when combined with the theories of evolution sponsored by Lamarck, Darwin, and others, provided a rationale for many to reject suggestions that Purpose could be found in nature. Hegel's idealism was presumably demolished by Marx's empirical use of Hegel's dialectic, wherein he took over the framework while discarding the belief that the substance of reality is Reason. Reinchenbach wrote the epitaph: "Hegel's system is the poor construction of a fanatic who has seen one empirical truth and attempts to make it a logical law within the most unscientific of all logics." (8)

With God dead, and there being no Reason imbedded in nature, scientific thinkers might be expected to agree with Bridgeman: "The world is not intrinsically reasonable or understandable." (9) Whatever logic, goodness or beauty one might seek must be found within man himself. But another blow was yet to fall. Freud posited a psychological determinism, rooted in a quasi-mystical subconscious, then Watson blew aside the mystical curtain to reveal that all our seekings as well as our findings were the product of conditioning. "We had thought the human reason capable of conquering all things," wrote Bridgeman, "now we find it subject to very definite limitations." (10) With our very thought processes being the product of irrational forces beyond our control, was there anything man could be sure of?

But the worst had not yet arrived. Positivism had made its entrance in the writings of 19th century sociologist, Auguste Comte, who limited knowledge to statements of observable facts and their interactions. In the third decade of our own century, the focus narrowed to the analysis of language used in the description of observable phenomena. Even the term "fact" was suspect. The bottom seemed almost literally to have dropped out of the knowable world. As Bridgeman expressed it, "knowledge must stop because of the nature of knowledge itself". The world, he said, eludes the physicist in the "highly unsportsmanlike device of just becoming meaningless". (11)

In an apparent effort to rescue contemporary man from the despair of cynicism, writers like C. P. Snow began to urge fellow scientists to reconsider their role in society. Proposing his "Two Cultures" thesis, Snow does more than reiterate the Frankenstein theme, but points out that while we have argued a great deal about the relativity of knowledge, and about cultural lag, scientists and technologists have gone right on creating devices for the progress and/or military destruction of societies. "It is in the making of weapons of absolute destruction that you can see my central theme at its sharpest and most dramatic, or most melodramatic, if you like." (12) Scientists must be free to pursue their research, but must never consider themselves immune from ethical responsibility, "letting the conscience rust".

But whence comes this "ethical responsibility"? Reinchenbach locates it in our psychological need to remain secure within a social group. "The rules not to steal, not to kill, and so forth, were rules the enforcement of which was necessary for group preservation." (13) Vannevar Bush, vehement against those who draw from science that "mankind is engaged merely in a futile dance, a meaningless fluttering over the cruel surface of the earth before an inexorable curtain descends . . ." has committed himself to a belief in the dignity of man, and in the necessity of democracy as the ultimate social value for the securing of individual freedom which he regards as the ultimate personal value. (14) Lewis L. Strauss, while serving as Chairman of the Atomic Energy Commission, echoed Bush's theme and went even farther (one might almost say "all the way") in the unabashed affirmation: "My faith tells me that the Creator did not intend man to evolve through all the ages to this stage of civilization only now to devise something that would destroy life on this earth." (15)

III

Is it possible that such a declaration of faith in a personal Source of values could have arisen from the scientist's experience with science per se, and not from motives of sentiment and piety? This returns us to the most critical point of our quest. There are at least two possible routes we might follow, both radically different yet consistent within their own frameworks.

The first route is by way of panpsychism, which is neither provable nor disprovable via science itself. It starts with an affirmation as defensible as the most basic premise of science, this latter being that we live in an orderly universe whose patterns and forces are intelligible to human reason. Panpsychism proposes that reality is psychic in nature, that Mind is part and parcel of every particle and aspect of the cosmos. The Hindu religion is panpsychic; Leibnitz (1646-1716) proposed this doctrine to make the universe comprehensible; Pierre de Chardin gave full explication of the concept in the Phenomenon of Man, in which he states, "When I speak of the 'within' of the earth . . . the 'within' is used to denote the 'psychic' face of that portion of the stuff of the cosmos enclosed from the beginning of time within the narrow scope of the early earth. Congenitally, if I may use the word, it already carried pre-life within it". (16) The connection between the two worlds of physics and biology, he believed, is the cell. But for a living cell to arise from mindless and inanimate matter is explicable only if one posits some kind of pre-mental-pre-life already inherent in the atoms and molecules. With each new composition and each evolutionary elevation of the compositions to higher and more complex structures, "awareness" becomes more acute within the several parts until, at the level of the biosphere, an organism emerges with a unifying consciousness. Through successive stages of evolution, organisms become more specialized and more intelligent, until man appears.

With Chardin, the elemental psychic force which is present in all particles and aspects of nature, is no mere life urge. It may appear this way when perceived in its most primitive manifestation, but seen from the perspective of its goals, it is the ultimate source of both life and value; more than "psyche," it is Love. "Considered in its full biological reality, love is not peculiar to man. In the mammals so close to ourselves, it is easily recognized in its different modalities: sexual passion, parental instinct, social solidarity, etc. Farther off, that is to say lower down on the tree of life, analogies are more obscure until they become imperceptible. Love in all its subtleties, is nothing more and

nothing less than the direct trace marked on the heart of the element by the physical convergence of the universe upon itself. Love alone is capable of uniting living beings in such a way as to complete and fulfill them, for it alone takes them and joins them by what is deepest in themselves." (17)

This interpretation of the nature of reality is still too heady and poetic for many scientists, who prefer to think that science must be confined to the observable and/or the measurable. Beginning with what can be agreed upon concerning the nature of atoms, they concur with de Broglie, that "The most unintelligible thing on the subject of the world is that it is intelligible". (18) To make the process of evolution intelligible, they posit the notion that once life has been established (assuming the link to be electrochemical, or "something else" yet unidentified), a wholly new set of forces begin to work to create change. Here Schroedinger's caution is worth noting: "From all we have learnt about the structures of living matter, we must be prepared to find it working in a manner that cannot be reduced to the ordinary laws of physics . . . because the construction is different from anything we have tested in the physical laboratory." (19)

This does not mean there are no laws for the scientist to consider; it simply means that the old "statistical laws" are inadequate. This led Max Planck to propose what he called Dynamische und Statistische Gesetzmässigkeit (Dynamic and Statistical Types of Law). The dynamic processes are harder to quantify, but include the inexplicable potential of a tiny group of atoms in a single cell to guide it into union with another cell unlike itself (the sperm and egg), form millions of copies of the union which then differentiate into eyes, heart, toenails, etc., and become a thinking, loving, governing, and self-reproducing being.

The process by which higher orders of creatures evolve is usually described with reference to mutation and natural selection. Sheer randomness could not account for an organism adapting to changing environment, but "mutations-with-survival-value," being successfully reproduced through altered genes, afford at least a possible explanation. "The mechanism of adaptation is natural selection: in every population some individuals have more offspring than others. Individuals in any group differ in genetic makeup, hence pass on differences to their offspring. In nature individuals that tend to have more offspring are either those best integrated with their environment, or those best able to begin to exploit an opportunity not available to their neighbors. Thus natural selection usually operates in favor either of increased adaptation to a given way of life, organism-environment integration, or of such change as

will bring about adaptation to another way of life." (20)

The place where traditional theories begin to reveal serious weaknesses is in accounting for the preparation within the embryo of functions and characteristics which will not be needed until many years after the creature is born, such as "wisdom teeth," pubic hair, or the chemical change that appears in the mother only after the birth of a child, to cancel the lactation inhibitors and permit the production of milk. The instrumental interpretation of nature, by which all modifications are seen as mutations or happy accidents, fails to provide an adequate ground for explaining the appearance of a creature who plans and purposes. Does the movement of nature toward the emancipation of mind bespeak a Source of mind, purpose and meaning guiding the evolutionary process? Perhaps all that can be said short of such speculation is that in fact the universe, by virtue of its laws, has indeed succeeded in producing the human mind, which with its wealth of significations appears without demonstrably having been intended. This human mind which does the speculating, is drawn at once toward a panpsychic interpretation of its own origin, and is cautioned against it. The fear of being disappointed by its illusions sends the mind back to re-examine the possibility that it arose fortuitously.

IV

Because such a wealth of evidence has been produced to support the conviction that we live in a mechanical universe (despite Newton's comment that "the universe behaves more like a mind than a machine"), the observation of Bertrand Russell persists in the popular mind as an accurate scientific depiction of reality:

Man is the product of causes which had no prevision of the end they were achieving; his origin, his growth, his hopes and fears, his loves and beliefs, are but the outcome of accidental collocations of atoms . . . all the labors of the ages, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction in the vast death of the solar system. (21)

Commenting on Lord Russell's essay, James Bryant Conant notes the statement reveals the fallacy of assuming that science provides a map of reality: "modern cosmology is based on experimental results unimagined fifty years ago, and this cosmology is subject to a somewhat different interpretation from that of Russell". (22)

The older view had been built on the concept of mass and velocity, the study of mechanics; on the notion of "aether" and its electrical forces; and on the continuity of measurement, so that one could trace all changes in any system to demonstrate cause and effect. This gave apparent credence to a dialectical materialism which, with Marx, had clear relevance for politics and economics, but concerning which Conant writes, "philosophically the whole doctrine seems to me utter nonsense". (23) It also seemed to provide grounds for a new branch of psychology based on strict measurement (as in Wundt's laboratory at Leipzig, and in the Structuralism of Titchner (24), and later for another branch which was to hold the stage for 70 years right down to the present: Behaviorism. Unfortunately for the field of psychology, its practitioners failed to keep abreast of those sciences on which they based their fundamental concepts. C. A. Coulson, mathematics professor at Oxford, notes: "Einstein's relativity showed us there was no such thing as an absolute position or velocity. The experiments of Michelson and Morley showed us there was no substantial aether, and that electric and magnetic forces depended on how the experimenter moved . . ." (25) Then came Heisenberg's famous Uncertainty Principle, and all the old cause-and-effect relationships collapsed in ruin. Behaviorists, accustomed to the older model of "reality" continued to make judgments on human behavior including value-formation, on the basis of materialist-mechanical concepts already discredited by physicists. Thus Niels Bohr, a Nobel Prize winner in atomic physics, says of modern science, "it condemns as irrelevant any comparison of living organisms with machines". (26) The bio-mechanism view of man, according to Frank Rhodes (Professor of Geology, University College of Swansea) actually began with Descartes' concept of animals as "nothing but machines" and "had been a most important factor in the development of physiological descriptions of organic processes in physico-chemical terms". (27) We encountered Schroedinger's rebuttal to this a few paragraphs earlier, but here it deserves to be reiterated. Any effort to reduce human activities, and especially the values they contrive to causeless mechanism, must result in a reductio-ad-absurdum, and a trivialization of the whole question of human relationships.

Conant laments that the older scientific view leaves us, in the realm of values, either with ethical trivia (e.g., tracing this or that behavior pattern to natural impulses and conditioning), or grandiose Utopianisms (e.g., Marx's materialistic manifesto) Conant's conviction is that we must somehow get around to "the Big Questions of the nature and destiny of man and the problem of good and evil". (28) Inexplicably, when men talk about "a scientific view" of the world, they leave out of the picture man himself, who is the one responsible for the view. To explain man and his value systems only and always in terms of mechanistic

antecedents (which are themselves known only through scientific conjecture), is to render impossible a serious examination of other points of view. "It is a creed suited in a crude way to the scientist-turned-inventor, for it glorifies his role; more than that, it denies that the scientist ever was anything more than an inventor or ever could be." (29)

In the pragmatic humanism of Brownowski, we find an appeal to view science in a new way: not simply as a body of descriptions of the material world, but as a means, as sure as poetry, for unlocking those "deeper illuminations" resident within our own thoughts "in whose light justice and injustice are seen in fearful sharpness of outline". (30) Independence, tolerance, and disciplined reason are for Brownowski, the keys which science applies but are also values in themselves. The question which must be posed, is whether these values actually arose from science, or are in reality the conditions Brownowski requires for the free pursuit of science. These conditions must be granted to scientists by other men, who may ask the question of Shakespeare's Shylock, "by what compulsion must I . . .?" The only answer that can be forthcoming apart from pure expedience is "by the compulsion of a commitment . . ." by a Kantian sense of duty. But duty to what?

Some scientists, as Conant affirms, find the ultimate answer in this be recognizing that science is but one way of looking at reality, but which, while not incorrect as far as it goes, must be supplemented by other ways of seeing and comprehending. The mechanistic view gained acceptance as long as we asked questions in mechanistic and quantitative terms. But when we begin looking at patterns, and ask whether patterns bespeak a Pattern-maker, we must adopt another frame of reference. And here, says Conant, the universe, even as revealed by modern physics, appears in a very different light revealing "evidence for some form of theism quite compatible with the Judaic-Christian tradition". (31)

Conant's "Big Questions" of good, evil, and man's destiny continue outside the province of science, yet it is the source of those questions, and of their answers, that most concerns us . . . ourselves, not as collections of molecules mechanically or organically comprised, but as men. The great dramas, the enduring scriptures of all religions, the lasting poetry, arise De Profundis, "out of the depths," revealing that Man has an extraordinary capacity for self-deception: He concocts creeds and "False Decretals" to establish Truth; brings all the weapons of cunning and depravity into play in the name of Love; killing in the name of The Prince of Peace.

There is nothing self-evident about man's having made himself

the subject of his own questioning. Yet from earliest records, it is clear that man, the riddle-maker, had become a riddle to himself long before he had even begun to solve all the "natural" riddles of his environment. Self-estrangement is a theme as old as language itself. And what is even more perplexing is that the sense of an inward "something" which forces him to look at himself critically, when that is precisely what man wishes to avoid, that "something" he cannot escape, cannot bury, cannot even embrace because it somehow belongs not to him alone but to a still higher something which he senses must be loved yet feared. In every great religion, there is an element which finds its Judaeo-Christian echo in the words of the prophet Micah: "He hath showed thee O Man, what is good; and what doth the Lord require of thee . . .?" This external, transcendent "He," is the Purposer behind the cosmic designs which is perceived by Alfred North Whitehead, when he writes in Science and the Modern World: "Religion is the vision of something which stands beyond, behind, and within the passing flux of immediate things . . . something whose possession is the final good, yet is beyond all reach . . . The fact of religious vision, and its history of persistent expansion, is our one ground for optimism." (32)

It was such a conviction as this that prompted Einstein to declare that in our quest for values, we must recognize "Science without religion is lame, religion without science is blind". (33) And in this vein, Charles Townes wrote, shortly after winning the Nobel Prize for his work on Masers: "Science and religion are broadly similar . . . for they both represent man's efforts to understand his universe, and must ultimately be dealing with the same substance. As we understand more in each realm, the two must grow together. For ourselves and for mankind, we must use our best instincts, the evidence of history and the wisdom of the ages, the experience and revelations of our friends, saints, and heroes in order to get as close as possible to truth and meaning." (34) The conjunction of truth and meaning, of science and values, of technology and responsibility comprise the ultimate concerns of science education.

Documentations

1. Einstein, Albert, Out of My Later Years, New York: Philosophical Library, 1950, p. 25.
2. Stace, W. T., "Man Against Darkness" in The Atlantic Monthly, September 1948, p. 54.

3. Quoted in the 1971 Britannica Yearbook of Science and the Future, Chicago: University of Chicago Press, 1970, p. 14.
4. Bacon, Francis, Selections, edited by M. T. McClure, New York: Scribner's, 1928, p. 288f.
5. Titus, Harold, Living Issues in Philosophy, New York: Van Nostrand Reinhold Co., 1970, p. 25.
6. Oppenheimer, J. Robert, Science and the Common Understanding, New York: Simon and Schuster, 1954, p. 74.
7. Plato, Phaedo, 97c - 99b., R. Hackforth, translator, New York: Cambridge University Press, 1955.
8. Reinchenbach, Hans, The Rise of Scientific Philosophy, Berkeley: University of California Press, 1951, p. 72.
9. Bridgeman, Percy W., Reflections of a Physicist, New York: Philosophical Library, 1950, p. 100.
10. Ibid., p. 147.
11. Ibid., p. 99.
12. Snow, C. P., Science and Government, (Godkin Lectures at Harvard) New York: New American Library, Mentor Books, 1962, p. 9.
13. Reinchenbach, op.cit., p. 285.
14. Bush, Vannevar, Modern Arms and Free Men, New York: Simon and Schuster, Inc., 1949, p. 186.
15. Strauss, Lewis L., "My Faith in the Atomic Future," The Readers' Digest, August, 1955, p. 21.
16. Pierre Teilhard De Chardin, The Phenomenon of Man, New York: Harper & Row Torchbooks, 1965, pp. 71-72.
17. Chardin, Ibid., pp. 264-265.
18. Gilson, Etienne, "En Marge d'un Texte," in Louis de Broglie, Physicien et Penseur, Paris: Michel, 1953, p. 153.

19. Schrödinger, Erwin, What is Life? (The Physical Aspect of the Living Cell), Cambridge: The University Press, 1947, p. 76.
20. Simpson, George Gaylord, The Meaning of Evolution, New Haven: Yale University Press, 1950, pp. 219-220.
21. Russell, Bertrand, Mysticism and Logic and Other Essays, London: Longmans, Green, and Company, 1918.
22. Conant, James B., Modern Science and Modern Man, New York: Doubleday Anchor Books, 1953, p. 140.
23. Ibid., p. 155.
24. "It is a simple historical fact that it was the kind of psychology which Titchner taught the enterprise which centered in the German laboratories, that first gained recognition for psychology as a science." Heidebreder, Edna, Seven Psychologies, New York: D. Appleton-Century Company, 1933, p. 148.
25. Coulson, C. A., Science and Christian Belief, London: Oxford University Press, 1964, pp. 46-47.
26. Bohr, Niels, Atomic Physics and Human Knowledge, New York: John Wiley & Sons, 1958, p. 21.
27. Rhodes, Frank, Christianity in a Mechanistic Universe, London: Intervarsity Fellowship, 1965.
28. Conant, op.cit., p. 137.
29. Ibid., pp. 155-156.
30. Brownowski, J., Science and Human Values, New York: Harper Torchbooks, 1963, p. 73.
31. Conant, Ibid., p. 158.
32. Whitehead, Alfred North, Science and the Modern World, New York: Macmillan, 1946, p. 275.
33. Einstein, op.cit., p. 26.
34. Townes, Charles, "The Convergence of Science and Religion," Think, published by IBM. March-April, 1966, p. 7.

211/
212

SECTION XX

THE LIMITS OF THE MODEL OF RELATIVITY BY PHYSICS FOR UNDERSTANDING
EDUCATIONAL PHILOSOPHY

DAROLD R. BECKMAN

Percy W. Bridgeman, Nobel Prize Winner in Physics, a contemporary of Einstein and contributor to the logical positivist position in philosophy, may not be widely known among educators, but his writings on intelligence have been sufficiently significant to be included in the recent anthology Modern Philosophies of Education by John Paul Strain. Bridgeman's article, dealing basically with his operational viewpoint, was sandwiched in between two articles by John Dewey in the anthologist's section on Experimentalism.

Essential to our theme is Bridgeman's dictum that a man has been liberally educated for a free society only when he has "learned to view instinctively the doings of men against the background of the potentialities of the future rather than the incoherencies of the past". Our task is to determine whether Bridgeman provides us with effective means, with his positivist outlook, to successfully accomplish that goal.

Bridgeman early began to speak of "operational definitions" in his Logic of Modern Physics back in 1927 in reference to the use of abstract definitions, like "space-time coordinates," as they relate to empirically-observable data. In other words, he considered his analysis process "operational," when he tried to discover what a question meant or to assure himself of the meaning of a term. Essentially, Bridgeman felt that what physicists did was significant to the thought processes for the social, as well as physical world. Bridgeman contended science may be "bankrupt," in the sense that the classical Leplacian concepts of physical determinism have collapsed, but revolutionary physics has suggestions for the complex social situation. In this century physicists have had to analyze the nature and limitations of their mental tools and this has led to a sort of thinking that ought to be useful to daily social situations and world political problems. Bridgeman calls this the "no-holds-barred" position.

Actually that position is a statement on the premises of the scientific approach to working out problems in which neither authority nor tradition is trusted, exclusion of personal prejudices is sought, potential errors are constantly checked, and all reasonable inquiry strategies are followed. If this is what intelligence is or does, then the realm of its utility is not alone in physics or natural science. It certainly could be applied to problems of human relationships.

This is highly commendable, for it opposes irrational, mystical, or supernatural solutions. Nevertheless, when a physicist enters the arena of social conflict with the mental tools of a neutral observer bent on resolving the conflict, he has already taken a kind of position, despite

his guise of non-partisanship. The stance taken by Bridgeman, as a scientist reflecting a model of relativistic physics, was non-historical, individualistic, and non-conscious of the laws of change. Each of these three aspects establish limitations on the problem of comprehending the role of educational philosophy.

The first serious limitation stemming from the physical model is the non-historical interpretation of relativity. The essential concept of change, of historical evolution, is obscured when juxtaposed elements, "events" or "points", are without succession but simultaneous in their very nature. In considering the notion of history Bridgeman said:

History has no philosophy, that is no unitary idea tying it together. There is no one motif back of history except the desire of human beings to get results, and their willingness to get them by any method, rational or not. The results that they get will depend upon the character of the individuals who have the power, and in the large must be a matter of chance, so haphazard that it is profitless to find any regularity in it." (P. W. Bridgeman, The Intelligent Individual and Society. New York: Macmillan, 1938, p. 300.)

This rejection of socio-historical laws need not be a consequence of the study of physics. That Bridgeman reached such a conclusion was due to his positivist philosophy of science, which conceives of physics, like Ernst Mach, as a collection of statements on the connection among sense-data, i.e., sense perceptions. This positivist position also reflects the subjectivism of the mathematician Henri Poincaré, who dismissed experience as a way of verifying causality, since in the general law of causality the word "state" can only be a "definition," a product of the human mind, rather than a factual proposition.

The point is that neo-positivism tends to justify the validity of its non-historical analyses of society by clothing itself sanctimoniously in a raiment of natural physical laws. In our scientific-technological society this is tantamount to invoking the blessing of God in a theological society.

Fortunately (or unfortunately, depending on your position), there is no *prima facie* evidence that the special laws of physics are replicated in human society. The problem of the physicist is that in dealing with subatomic particles (protons, neutrons, mesons, etc.) he may tend to think of his world of study as symbolic, semantic, or theoretically logical because the properties of the entities examined are a step or two removed

from our normal perceptive processes. Reality is what you say it is, according to the positivists, and a description of reality is "significant" (Bridgeman does not use the word "accurate" here) only when it is correlated with successful prediction.

The specific laws which describe physical phenomena as objective reality are useful and valid, but their seizure and application to human society is as defective today as it was when Thomas Hobbes attempted to use a mechanistic model in the 17th century to explain society. It is even worse when science, man's conscious approach to understanding nature, is removed from its real basis by considering it simply as a verbal structure, rather than as a practical activity of mankind that reaches a high level of theorization within humanity's physiological-neurological system.

Physics, whether mechanistic, deterministic, or relativistic, is not concerned with social history. It is concerned with space and time and the problem of motion. Some contemporaries may see physical theory only as logical analysis of perceived phenomena. This dismisses man's upward struggle against nature, his gradual conquest of knowledge in the daily pursuit of agricultural, industrial, and economic effectiveness, and the reflection of this consciousness in qualitative growth of language, verbal sensitivity, and conceptual organization. The physicist is more apt to view nature and describe phenomena as a situation with a set of givens, instead of interpreting the whole dynamic, evolutionary processes of nature in its erratic movement and qualitative leaps. History does not yet compliment the physicist, as his science is only becoming. For this reason, physics in its most common models is an untrustworthy guide to social understanding.

Philosophy of education is incomprehensible without an effective historical world-view. History has the capacity to unite people for it reveals the timeline of progress and the significance of movement from the simple to the complex. How can goals and objectives be described outside the framework of society? How is the concept of competency identified except with the process of self-realization and social accomplishment? How can a program of educational growth in aesthetics or value judgment be manifested if a society is devoid of seeking more liberalizing standards? A philosophy of education which merely shifts around the furniture of the mind until it becomes "meaningful," like a neurotic housewife oppressed by her own closed marital system, is non-historical. One only recognizes a future if he acknowledges a past.

The second limitation which Bridgeman imposes on the philosophy

of education is his one-sided individualism. In his "New Vistas" he says, "Intelligence can be given meaning only in terms of the individual. ... Intelligence is based on the individual". It would be more accurate to say that intelligence is manifested by, not based on, the individual. Intelligence is the total activity of using the sense organs to receive and store knowledge, to abstract thought from perceptions, and to direct this cognitive state back to new, practical, living situations. Bridgeman and other positivists not only recognize but emphasize the significance of language, the complex verbal structure of people, in its relation to the aspect of thinking. Yet, they seem to ignore language as a truly society-individual product, where words are used with and for an audience. We carry with us in the language overlays of deep, nearly-forgotten cultural heritages, where myth, poetry, and art become imbedded in our commonest words and word-stems, providing us in crystalized sounds the pastoral and craft practices of the past, symbolic hints of man's former activities and his semantic insights into nature and society. This is a huge investment in language. The dynamic process absorbs the totality of man's operations from the latest military electronic research to the study of molds and to interpretations of constitutional concepts in law and descriptions of rock music. Language is both adequate and inadequate to meet new situations. Intelligence requires inventions in meaning to overcome inadequacies. This is where the positivist, turned analyst, urges all efforts to be focused, where meaning can be brought out of the language alone. But, he flounders because he sees the individual using the language, and forgets the collective that has produced the language.

The relationship of the item to the set, the individual to society, the part to the whole, resolves itself into a philosophic orientation. You can focus on one or the other or consider both together. Since Bridgeman selected the individual as his basis, he locked himself into a philosophic orbit as a way of thinking. To have selected the society as the directional signal would have been equally fatal in its determinism. The third orientation provides more diversity in the resolution of problems.

Just as the individual is the concrete, and the collective is the abstract, the path toward knowledge requires the sensory perceptions of the external phenomena by the individual and his transformation of the essence of that phenomena, of its internal nature into an abstraction, a concept (word, parable, symbol, etc.) so that it may be communicated on a new level to the collective. Concepts are not developed in isolation, divorced from society. Concepts in teaching are created in experimental practice. The process goes far beyond any verbal analysis, where one simply tries to describe and define, to evoke and clarify differences in

meaning. Concepts become synthesized as well as analyzed. The practical day-to-day activities lead to judgments, conclusions, hypotheses, theories, and laws, all as higher cognitive operations, not as pure neurological processes of individuals, but as societal interactions that tend to minimize the errors of subjectivity. A future in education, as in all of man's fields, is built on this process, because man is going somewhere. He is not lost in an existential nothingness or a pragmatic adjustment.

The third limitation which Bridgeman brings to educational philosophy refers to the laws of change. Certainly theory which has been verified in practice is a powerful elixir, but it needs advocates to carry it forward. Intellectual partisans are prerequisites to carrying the day and winning solutions of the problems. Every social or educational problem exists on two levels. The first level is its logical, theoretical, intellectual solution. The second level is its political, practical, effective solution. There are many who step forward to vociferate on the first level, some with excellent solutions, others with false solutions either from ineptness or conscious deception. At the second level participants must combine right theory with right action in order to succeed. The laws of chance have already reduced their numbers. When this fact is combined with callousness, indifference, impotence, fear, pessimism, or other emotional dispositions, one wonders how significant social change ever does come about. The answer is that the right material conditions combined with the aforementioned right theory and right action makes for the transformation. In other words, crisis conditions reduce fear and indifference, multiplying the partisans, and effecting the change.

What Bridgeman and other positivists advocate is essentially at the first level only with their logical analysis of the problem, and as he says in "New Vistas for Intelligence," to understand "without any definite visualization of all the steps by which this analysis may prepare for the final solution". Philosophy at this level is merely interpretation. There is no guide for taking steps to resolve a social problem. Certainly without diagnosis there can be no strategy to resolve a problem, but without organization and activity to attack the problem, there can be no solution.

Philosophy of education needs convictions, partisanship, and dedicated personnel to bring about change in the future. This is a law in itself. The issues of sex roles, of the rights of blacks, Chicanos, Puerto Ricans, and Indians, of consumer education, of democratic responsibility, of the meaning of freedom are too important to leave only at the level of analysis. Action for effective results must be writ into the philosophy as well.

Perhaps the model of relativistic physics is not to blame for the limitations we have raised. I suspect nature cannot be blamed. Only people can be accused, especially ones like the positivists who verbalize grandiloquently, then smirk with satisfaction over their analyses, even though the problems still are around to have and to haunt.

SECTION XXI
INDUSTRIAL EDUCATION AND DEMOCRACY

SAMUEL BURKHARD

What may well be regarded as the primer to John Dewey's philosophy of education is his book The School and Society. The first printing of this book appeared in 1899. It contains the three lectures he gave to the patrons of the elementary school then in operation under his direction in connection with his work in the University of Chicago. The thought advanced in these lectures deals with values inherent in industrial arts education which he later on elaborated in his book Democracy and Education. In this later book, he deals with implications for education in the management of social and industrial affairs to the end that they may serve more effectively the human desire to live.

We have no authoritative knowledge as to when and how the earth came into existence. Furthermore, we have no authoritative knowledge as to whether the earth was made for man or for bugs. We have no way of knowing what bugs may think as to ownership of the earth, but we do have man's conclusion that he is the owner and custodian of it. Bugs have a way of giving man a lot of trouble as he undertakes to manage his affairs. A biblical writer confirms the assumption that the earth was made for man when he wrote: "Thou hast put all things under his feet." Ps. 8:6.

Without attempting to settle the question of ownership, man finds himself living with his two feet on the earth. Only recently has he been able to get away from it for only a short time.

From the very beginning of human history, man of necessity had to engage in industrial activities. Nature provided him with an abundance of natural resources. He was confronted with the necessity for finding ways to reconstruct them in order to satisfy his wants. One basic truth in human affairs is that man lives by production.

There is nothing new in the observation that our times are changing. But in spite of changes that take place from time to time, there are some things that always have been and still are present in human affairs. The desire to live is characteristic of all men everywhere. In order to satisfy this desire, man must have food. Clothing and shelter are important items also. In addition to the foregoing necessities, it is well for us to pay attention to the observation that "man does not live by bread alone". Matt. 4:4. Another constant fact in human affairs is that if man wishes to live he must "work". By definition, the term "work" as used in this discussion includes all activities which are carried on with a view to satisfying a multitude of human wants.

Nature did not provide original man with an answer book to which he could turn for instructions for turning his resources into articles he

could use. This meant that man had to start from scratch and make use of experimentation as a method for gaining knowledge. Among other things he learned from experience was the fact that his wants could be more adequately satisfied by working in cooperation with his associates. We still rely on mutual assistance in seeking to get the world's work done. In spite of the many conflicts in current human affairs, it is well to take note of the fact that in our daily affairs we get on as well as we do because we manage as well as we do in cooperation in the production and distribution of goods and services.

An element of mutual assistance operates in systems of slavery. But slavery is never satisfactory to workers because it fails to give them a just reward for the services they render. Slave owners manage to get the lion's share of the wealth produced, and slaves remain poor.

Discontent with any unjust distribution of goods creates a demand for better arrangements in industrial management. With the march of time, the ideal of democracy gained attention as a guide line in the administration of human affairs. The concept of democracy is based on the assumption that the members of society are entitled to receive just rewards for the services they render.

John Dewey is eloquent in his defense of industrial and economic history in the educational program. In dealing with the significance of geography and history in the school curriculum, he states

Industrial history of mankind gives insight into two important phases of social life in a way which no other phase can possibly do. It presents us with knowledge of the successive inventions by which theoretical science has been applied to the control of nature in the interests of security and prosperity of social life. It thus reveals the successive causes of social progress. Its other service is to put before us the things that fundamentally concern all men in common -- the occupations and values connected with getting a living. Economic history deals with the activities of the common man as does no other branch of history. The one thing every individual must do is to live; the one thing that society must do is to secure from each individual his fair contribution to the general well being and see to it that a just return is made to him.

Economic history is more human, more democratic, and hence more liberalizing than political history. It deals not with the rise and fall of principalities and powers, but with

the growth of the effective liberties, through command of nature, of the common man for whom powers and principalities exist.

When the history of work, when the conditions of using the soil, forest, mine, of domesticating and cultivating grains and animals, of manufacture and distribution, are left out of account, history tends to become merely literary -- a systematised romance of a mythical humanity living upon itself instead of upon the earth. (1)

It is all well and good that just rewards should be given for services rendered. Some services are judged to be worth more than are others. But how shall we determine the worth of any given service? Under our existing economy, there are those who manage to gain large rewards in terms of money, and there are others who get barely enough to keep the wolf from the door. And for a variety of reasons we have large numbers of unemployed persons. No work, no income. People without money vanish from the market place.

In literature dealing with industrial problems, it is customary to speak of labor, management, and the consuming public. But this is a highly artificial method for putting people into classes or groups. The fact is that at one time or other all citizens are managers, producers, and consumers.

In the early dawn of human history, barter in goods was an accepted means for carrying on trade. We still continue to trade in goods and services and settle our accounts with money.

Industrial managers must have access to raw materials with which to carry on in their lines of production. Employees are paid in salaries and wages. Managers need to make profits in order to meet operating costs and the demands of the payroll. In turn, managers must look to customers as a source of income with which to remain in business.

Industrial history is filled with accounts of conflicts between labor and management. Labor may resort to the method of striking to gain better working conditions. Management may decide to meet the demands of labor, and it may also decide to close the shop and go out of business. If wages are increased, then prices for goods will go up. When prices get out of hand, the consuming public may also resort to a form of striking by buying less and waiting for a better day.

Various terms have been used as labels for conditions that

accompany industrial conflicts. At one time we spoke of panics. In 1929 there was a depression, and more recently we have come to speak of recessions.

Currently, management is seeking for ways to control inflation. We may well ask: Why do we have inflations? One thing that we do know about them is that they have a way of appearing as an aftermath of wars. Whatever else we may think of wars, we do know that they are destructive not only of men and natural resources, but also of the fruits of the field and of labor. Modern methods of waging war make huge demands on oil and its derivatives. With an increasing demand for raw materials, prices go up. We spend millions of dollars to wage war and for preparations for war. Then after war, we have spent huge sums to rebuild cities that were destroyed. This lavish waste goes on not only in our own country but in other countries as well. With a serious look to the future of humanity, it could turn out that wars and preparations for waging them could eventually result in creating a barren earth on which man can no longer live. Man must come to grips with the truth that he lives by production and not by destruction.

In times of wars, conditions are created in which taxpayers reluctantly provide the money with which to pay for military hardware and other materials necessary for waging conflict. By virtue of legislative enactments, tax collectors manage to secure an abundance of money and put it at the disposal of the managers of war. Recent reports dealing with financial managements tell of the graft and corruption in the production of war materials. Furthermore, in a time of war, prices and wages tend to go up. One thing that worries us at the present time is to know how high wages and prices can go. If there is a limit as to how high they can go, how high is this limit? And if there is a limit, what is to be done when it is reached? If they can no longer go up, then it would seem that the only way they can go is down. And how far is down?

At this point the question may be raised as to what the foregoing discussion pertaining to industrial management has to do with education? Basically, education is concerned with the development of characters who are capable of giving good management of the down to earth business where we live and have our being. The important question is: To what ends shall our resources be used? Answers to this question will vary depending on the states of mind by which managers and mis-managers carry on.

Education is concerned with the mind-building process. John Dewey has stated with great clearness the case for the democratic ideal as a guideline in educational activities. He assumes that industrial

management should move in the direction of seeking to satisfy the wants of the members of society.

It is to be expected that a society of producers will accumulate an abundance of goods. Furthermore, under competitive arrangements, it is to be expected that some individuals will become more wealthy than others. The moral issue involved in an individual's accumulation of wealth resides in the method of its accumulation. Has it been gained by fair or foul means, and to what ends has it been used.

Education needs to stress the fact that we are all dependent creatures. Make a list of the people that in one way or other have something to do with supplying you with the things that you call your own. Then in turn, we might well take account of the things we have given in return for the goods and services rendered.

Recognition of social interdependence is basic in the structure of the humane society. The democratic ideal calls for education in which the aim is to produce characters who are dedicated to the ideal of service. There may be some who will resent the idea that we should be public servants. But strictly speaking, there are but two classes of people. One group is made up of public servants, and the other group is made up of the public leaches. Characters dedicated to the ideal of service will move in the direction of seeking to make life to become more livable for an ever increasing number of people.

The educative process begins in the family. Schools have been established to supplement the home environment. But there is a limit to what schools can do because they represent only a part of the total environment in which the educative process is carried on. Newspapers, magazines, radio, television, movies, service clubs, and churches along with many other associations all have a part in building minds. Conflicting philosophies prevail in political associations, in religious societies, and in educational institutions.

The assumption is that people living under democratic arrangements are entitled to hold diversities of ideas concerning the management of human affairs. It is assumed also that we are free to examine any and all ideas with a view to seeing how effectively or poorly they operate to satisfy the wants of the people. The test of the pudding resides in the eating. There is always an element of risk in launching a new venture. But people who are not willing to take chances with new ideas are not fit for promoting the democratic ideal.

Mutuality in respect for persons is essential to the promotion of a progressive social order. John Dewey is opposed to the establishment of orthodoxies in beliefs as a requirement for being a respected citizen. It is in the very nature of experience that diversities of ideas should prevail in a free society. But diversities of ideas need not stand in the way of cooperative action in seeking to promote the common good. It is but natural that individuals should want their freedom, but freedom without an acceptance of responsibility for seeking to promote the common good paves the way for anarchy.

Attention needs to be called to the introduction of industrial arts into the school curriculum. By so doing, children are provided an opportunity to become acquainted with a variety of natural resources, and to discover the manner in which tools can be used in creative activities. Along with the five senses, the hand is an important asset in the educative process. We need not look upon industrial arts education as preparation for some particular vocation. Both pleasure and mental balance may well accompany turning raw materials into useful and beautiful articles. There was a time when working with tools was supposed to be good for the reclamation of delinquent youths, and also for slow learners and dumb bells. But for all other children, it was supposed that their educational needs could be accomplished in the presence of teachers who made use of books.

Instead of regarding industrial education as a sort of sideline in the curriculum, the import of John Dewey's philosophy is that it moves right down through the main street in human affairs. Industrial activities were in operation long before there was any accumulation in what we now call the classics. Philosophies, theologies, and other cultural products have their roots in activities carried on in this one life we live on this one earth.

The eternal question in human affairs is: When do we eat, and how will we get the food we want? Empty stomachs must be filled. Empty stomachs are a greater hazard in human affairs than are empty heads. The first petition in the Lord's Prayer calls for daily bread. In addition to the necessity for work to supply our many wants, Jesus of Nazareth calls attention to a state of mind that is basic in the method for securing our wants. His recommendation was that we should seek first the kingdom of heaven and then the many things that we want will come to us as a natural consequence. (Matt. 6:33) This recommendation is equivalent to saying that we should come to grips with democratic idealism as a guideline in the administration of human affairs. This means that the humane society will have what it takes to move into a greater realization of the life good to live.

The challenge to social leaders, industrial managers, politicians, professional educators, religious leaders, journalists, homemakers, and other mind-building agencies is to come to grips with the problem of character education as a prerequisite for insuring human survival.

If man persists in waging wars and engaging in other destructive activities, he may eventually end up with having created a new earth on which human life is no longer possible. Even now we are feeling the growing shortages of many items on which industrial activities depend. Democratic industrial education must become the password to the humane society and for the promotion of a management dedicated to the search for the life good to live.

The assumption underlying this discussion is that man has the capacity to become the master of his affairs and that education should seek to give him confidence in his potential ability to manage his affairs. Man does not need to consider himself a weak worm of the dust. We no longer subscribe to the doctrine of theocratic determinism, and it is well to abandon the doctrine of economic determinism. What we need to assert is that MAN IS THE MASTER.

Documentation

1. John Dewey, Democracy and Education, pp. 252 and 253.

SECTION XXII
MORAL AND AESTHETIC REASONING

MICHAEL J. PARSONS

I

The title of this paper is "Moral and Aesthetic Reasoning," but I'm going to talk more about the aesthetic part of it than the moral. What I want to do is to draw the parallel between moral reasoning and aesthetic reasoning, and that's my reason for following the paper by Don Cochrane. He has spoken about the nature of moral reasoning, and that allows me to talk mostly about the aesthetic half of the parallel. My parallel operates only at the most general level, though: I cannot pursue it into the detail of what Don has said.

My reason for wanting to discuss this parallel is that I am now convinced that it should be possible to study the development of aesthetic judgment, in the same kind of way that the development of moral judgment has been studied. And I think that this development (of aesthetic judgment) could also be described in terms of a sequence of cognitive stages. I think, in short, that one could do a Kohlberg on it, if one starts with the right construction of aesthetic reasoning.

I should perhaps say right away that what I am going to say about this possibility is purely speculative. I have not myself done a Kohlberg on aesthetic judgment, nor has anyone else, although the idea has been suggested several times. What has always been lacking, I think (apart from the time required for longitudinal developmental studies, and the kind of funding it would require), has been the conceptual structure required to imagine how the stages of development might go. One needs to have a category system in terms of which to describe the possible dimensions of stages of aesthetic judgment, before one can go out to collect the data that would be needed. One cannot study development of any kind until one has some idea of the end toward which the development leads, its telos. Otherwise one simply has no idea what to look for in studying children's responses to art. This is the importance of talking about aesthetic reasoning. If one can get clear what the procedural principles of aesthetic judgment are (to use Don's terminology), one can look for their history in the judgments of children. I, therefore, think the discussion of this topic is a necessary preliminary to the work of a cognitive-developmental psychologist interested in the development of aesthetic judgment.

In discussing aesthetic reasoning, then, I am not interested in debating its nature per se; I am interested rather in the question what must be assumed if there is such a thing as a cognitive-developmental psychology of aesthetic judgment. I want also to draw attention to the

notion 'aesthetic judgment'. It covers a much smaller territory than does 'aesthetic experience', and is obviously of less interest. I expect that some of you may already have taken a somewhat negative attitude to the idea of studying the aesthetic judgments of children on the grounds that what is really important in this area is their appreciation, not their reasoning; stressing by 'appreciation' their affective responses to works of art. What is important in art, you might be thinking, is feeling; if you don't have feeling, you don't have anything. I am not at all unsympathetic with this kind of attitude, nor I think is my argument. There are two lines of response I could briefly indicate, though I hope the apparent force of the objection will recede as I go on. One is modest: to ask why not study the aesthetic judgments of children while acknowledging that they are not of primary interest? It may help clarify something in our foggy awareness of children's interactions with works of art. For just as aesthetics, we might say, has primarily to do with affect and not reasoning, so morality has primarily to do with action and not reasoning; yet Kohlberg has made a contribution of some value. And we can then take the relation between judgment and feeling in aesthetics to be an empirical matter, for subsequent investigation, just as Kohlberg takes the relation between judgment and action in morality to be an empirical matter.

But this points to a second, more aggressive, defense, one which I prefer. It is to deny that one can separate so easily the judgments and the feelings of people, including children, especially in connection with art. This is basically because, as R. S. Peters has insisted many times, affect is intentional, or directional, and is dependent on one's understanding of the situation. One marvels at something; one feels sadness at something; and this requires that one judge something to be marvelous, or unfortunate. Most importantly, in the context of development, certain kinds of feeling may be impossible without certain kinds of thinking. For example, moral outrage, as opposed to feeling angry or insulted, may be impossible before one reaches Kohlberg's stage 4; similarly, perhaps, appropriate affective responses to tragedy may be possible only at a late stage of aesthetic development. According to this line of thought to study the development of aesthetic judgment would be also to study the development of at least the bounds of affective responses to works of art. And, to put it another way, the power of subtle and accurate feeling is as much as anything a conceptual achievement.

II

So much for explanation and apology for talking of aesthetic

reasoning. What can be said of the parallel with moral reasoning?

By aesthetic reasoning I mean here what can be said to justify judgments of the sort that an object *x* is good from an aesthetic point of view. If the parallel is to hold, the first thing to say is that such reasons must be inter-subjective. By this I mean that they must be based on facts about the object that are publicly accessible, that can in principle be apprehended by anyone willing to notice them. I don't mean to deny that some relevant training, sensitivity or knowledge may be necessary in the observer and certainly I don't mean that it must be something everyone would notice in fact; but this does rule out essentially private feelings and relations with the object; things which, as Monroe Beardsley argues, good critics do not in fact appeal to. The second thing to say is that such reasons have reference only to the phenomenal qualities of objects, that is, qualities that can be apprehended through the senses, the appearances of things. To say this is not to restrict these qualities to very simple ones, certainly not to the quantifiable nor the easily observed and verified. It is not to deny that they might be subtle, complex, or what Monroe Beardsley has called 'regional' qualities. In fact, I assume that these 'regional' qualities, such as sadness, majesty, chunkiness, are the most important kind for aesthetic judgments.

Putting these two together, the requirements that aesthetic judgments refer to what is publicly accessible and to what can be apprehended by the senses, we have what is parallel to Don's major procedural principle, which we might phrase: respect for what we can perceive. The normative character of this is evident enough, just as is that of its counterpart in ethics. It says that aesthetic judgments are about the perceived qualities of things, and may be disputed by reference to these qualities. It rules out various forms of emotivism and subjectivism: any views that hold that aesthetic judgments are merely expressions of emotion, or that they are equivalent to assertions that the speaker, or some other person or groups of persons, like the object in question. I think it is important to see that any view that is to be useful to educators or to cognitive-developmental psychologists must be at least this normative. For the notions both of 'education' and of 'development' are normative, and imply that at the end you have something better than at the beginning. If one is to speak meaningfully of either education or development with respect to aesthetic matters, one needs some such assumption as this. If only we were all convinced that aesthetic education or aesthetic development were possible, then this might constitute a transcendental proof of what I have said. But, of course, we are not all convinced, and one reason is that we have no very convincing way to imagine either that is, no plausibly elaborated dimensions in which

to conceive them. I shall try briefly to suggest how these dimensions might be constructed, using this brief and very general suggestion about 'aesthetic reasoning'.

I want to stress the tentative and speculative nature of what I am going to say. I have not done the kind of patient research that is required by these suggestions, and they are based only on speculation, on a few conversations with children, and on what I take to be common sense about the capacities of children.

III

One can consider the reasoning behind aesthetic judgments as more or less inadequate or inappropriate, according to the above, in two ways: if it fails to take into account all of the relevant qualities of an object, or if it takes into account qualities that are not relevant, that is, qualities that are not phenomenal, or are not publicly accessible in principle. I think children display both tendencies, though the latter is the more interesting.

According to developmental psychologists, including Kohlberg, children start life with a set of rather global or molar responses to the things in the world. They feel pleasure or displeasure, but do not much discriminate their sources. If affect is intentional, nevertheless young children do not know, often, on what it depends. Hence we can say that children begin with the capacity to be pleased by the perception of the qualities of things, i.e., they are citizens of the realm of aesthetics from the start. They are never 'pre-aesthetic'. Otherwise, aesthetic development could never get off the ground, for one could not instill that capacity into children. Perhaps that is what the educational Romantics have in mind when they insist that, after all, "art can't really be taught". But the experience of children, if it is aesthetic, is confusedly so; just as it is confusedly moral, or scientific. For young children do not distinguish the pleasure due to the perception of the qualities of things from that due to other features of experience, such as memories, or sensations, or desires. Hence they can not give only the relevant kind of reason in making aesthetic judgments. This differentiation of the sources of affect I think is central to aesthetic development; and, as I have suggested, more is involved, probably, than just the gradual growth of an intellectual ability. For as one begins to pick out what is and is not relevant, so the character of one's feeling response must also change.

Let me give two brief examples of this inability. The first is that of a young child, aged five and a half, from a discussion of a reproduction of the Currier and Ives Preparing for Market, a rather bland but detailed scene of farm life. He had looked around and chose this painting as the one he liked most. He was asked why he liked the painting, and he said, in essence, it was because it reminded him of his cowboy hat. He was asked if it was a good picture for that reason, and he said it was.

I hardly need say that his cowboy hat was not represented in the painting, nor was anyone else's cowboy hat. He liked the painting partly because he was reminded of his hat by something in the picture, and it is clear that that was as important and relevant a part of the experience as was what he actually saw. At the time, it was clear that he did not make this distinction between what he could see and what he was reminded of; he did not, as it were, make the mistake of thinking he saw the hat in the picture. Seeing and remembering were not two elements of the experience, felt or thought of as distinct; the pleasure of thinking about the hat was all one with the pleasure of seeing the painting.

His comments also make it plain that for him, to say that he liked the painting was much the same as to say that it was a good one. Normally, of course, adults distinguish the two: one says something about oneself with which others could not easily disagree; the other is a judgment about the qualities of the painting, with which it would be sensible to agree or disagree. It is as if the child had not thought whether others would see what he saw, nor whether their experience of the painting would be similar. We cannot say, again, he made the mistake of thinking that others would be reminded of their cowboy hat for he had no awareness of these questions.

A more complicated case is that of a girl, somewhat older, who said, in effect, that she liked the same painting because it made her think that, if she lived on the farm in the picture, she would like it. The context of this remark showed that she had responded more relevantly than the boy just quoted. She had noticed more of the painting, and had looked at a good deal of the detail, and was attracted by its rural charm and peacefulness. But she had also projected herself into the painting to see if she would like to be on the farm; and she didn't distinguish the pleasure of imagining herself on the farm from that of seeing the objective qualities of the painting. One way to say this is to say that she did not distinguish the appeal of the object represented from the appeal of the representation. She responded to the painting in part as she would respond to the sight of a real farm.

I cite these two cases as not unusual of young children, and my point in general is that they do not appear to distinguish in their judgments between what is publicly present for all to see in a painting, and what is not. This results in not making two other distinctions usually taken for granted by adults: between liking a work and judging it good, and between the appeal of the subject of a representation, and that of the representation

I think that this situation of the young child can be understood in the light of the notion of egocentricity, as used by Kohlberg and cognitive-developmental psychology generally. He cannot take into account what others can see, any more than he can consider the interests of others, and for the same reason. He cannot easily imagine himself in the role of another. The young child is egocentric in that he necessarily understands everything in terms of its relation to himself, according to this tradition. There is a parallel between the child who thinks actions right or wrong according as they bring him reward or punishment; and the child who thinks objects aesthetically good or bad according as they bring him pleasure or displeasure. And just as the gradual passage from this kind of egocentricity to the inter-subjectivity of adulthood lies behind Kohlberg's stages of moral development, so to it might well determine stages of aesthetic development.

I will give one more suggestion of a parallel development of aesthetic reasoning with that of moral reasoning. It concerns the use of rules in what Kohlberg calls the conventional stage, his stage 4. It seems to me that children at pre-adolescence and later do begin to use rules when judging works of art. I do not necessarily mean that these rules are consciously entertained, and certainly not that they are intellectually elaborated by the child. Nevertheless something like a rule is operating when a child imagines other people having perceptions and responses similar to his. He will come to think that, if a particular quality of an object appeals to him, it must appeal to others. To think this is to locate the attractiveness publicly in the object itself, such that it will be seen by anyone who looks for it. Such a location implies a rule, and is a major advance in decentering.

In a way, the use of rules is necessary if the child is to learn to distinguish what he likes from what he judges good. He will be able to judge as good those things that satisfy the rules, and will then be able to discount as irrelevant, aesthetically speaking, the various private associations which are not qualities of the object.

I will give one example of such a use of rules: a ten-year-old

girl, a very sensitive child, talking about Raphael's School of Athens. It was, she said, a good painting because "the background and the whole thing shows gracefulness, the way they're standing, the crowds and the building". This suggests a rule having to do with formal balance and design, such as that any painting balanced and arranged in such a way is good. But the girl added that she did not like the painting, because, she said, "it doesn't look like a place to be"; a remark that reveals the egocentricity of an earlier stage, for it seems to mean: "If I were there in the picture among those earnest greybeards, I would not enjoy myself".

The same child judged Goya's Execution of the 5th Day of May a good painting, saying, among other things, "Yes, the men are all lined up and the picture is all together" -- again using a rule about composition, apparently. At the same time, she disliked the painting very strongly, because of its violence in it.

These remarks are representative in that in my observation the rules that are used at this stage relate to the most obvious aspects of form, those prescribed by what one might think of as the old-fashioned rules of composition: Proportion, centering, balance, clarity. There is also a preference for appropriateness of color, gesture, incident and perspective. For example, it is notorious that children in our society often show during pre-adolescence an increased awareness of, and fondness for, realism of color and drawing, and are often highly critical of its absence. This is frequently taken as a loss of creativity and imagination, and blamed on the drawing master; and the educational aim is adopted of avoiding the loss. But if the developmental hypothesis is correct, we should have to change our attitude here. If there is a rule-oriented stage, then realism is bound to feature heavily in it, in our culture; and reaching that stage cannot be regrettable, though staying in it can. It is not hard to see why acquiring a set of rules should look like a loss of creativity and spontaneity in the child. But that which was lost was innocent of any rule-like expectations or norms, and was, therefore, very different from the creativity of the adult. It seems inappropriate, therefore, for educators to deplore the advent of such a stage in the aesthetic judgment of the child. There is obviously much more to be said about the child's use of rules in this way, but I have not yet done the investigation that saying it would require.

In summary, my point has been that there does exist a parallel between reasoning in morality and in aesthetics, and that the parallel can be suggestive of stages of aesthetic judgment similar to those elaborated by Kohlberg. I wish I could pursue this parallel in greater detail, but I think that would require a major research undertaking into the aesthetic judgments of children. I hope only to have stimulated reflection on such a project.

SECTION XXIII

THE DEVELOPMENT OF THE CAPACITY FOR AESTHETIC REACTION
THROUGH AUTONOMOUS CHOICE

CATHARINE PHILLIPS FELS

The decision-making implicit in any aesthetic production is easier to perceive than in the aesthetic "reaction-to-the-object" situation. It is the thesis of this paper that it is, nevertheless, not very different in nature; or, perhaps more accurately, that the two kinds of decision-making overlap, having considerable areas of similarity. Practice in one kind of aesthetic decision-making then, has relevance to the development of abilities in the other kind.

If this seems too obvious to call for discussion, one can defend the undertaking by pointing out that "Art" is often taught to children with the decision-making removed. The teacher passes out mimeographed chicks and says, "Color them yellow," or mimeographed hearts and cupids and says, "Paste them on a doily". At its worst, this is what art educators bewail as "recipe" teaching.

At the other end of the spectrum is art appreciation at the college level that is taught like art history. Art history is a respectable scholarly field, but its study does not necessarily lead to aesthetic encounter with works of art. It may be helpful for some, but historical data can get in the way of the aesthetic perceptions of others. This may well be because the historical information leads them away from personal decision-making into paths of thought leading away from the work of art rather than intensifying the focus of attention on it.

Artist and viewer must make similar decisions at the beginning of an aesthetic encounter. The artist must decide what kind of a work of art he will make. The viewer, who has a slightly different decision, since some limits are already set for him by the artist, must recognize what class of art he is viewing. The recognition is a decision. If the viewer cannot classify in any way whatever he will not be able to recognize the work of art as art. (We should distinguish between art, which we define as man-made, and natural objects of aesthetic encounter, such as sunsets.)

This first decision is in answer to the question, "What is it?" For a viewer to have an aesthetic encounter he must decide that the answer is, "It is art". Often at the same moment he decides what kind or class of art.

The first decision the artist makes is in answer to the question, "What class of art will I make?" If an artist is long established as a painter or sculptor this decision may have been made in the past and does not seem to be necessary over and over again. Even though habit may make the decision, it is nonetheless made. At the beginning of each new work

there is a possibility that the artist may choose another path. Our culture is so heterogeneous that many artists do choose another path than they have previously taken. That this is so clearly the case emphasizes the action of decision-making in the aesthetic processes of production.

The significance of this decision as to what class of art it is, or what class of art it is to be, is that it is the first necessary incident in aesthetic experience. Recognition of the aesthetic nature of an experience can come later in the encounter in certain instances. For example, the discovery that anthropological or archaeological material that was primarily interesting for sociological or historical significance also has aesthetic quality. The discovery has the nature of decision-making; it is at the point of making this discovery that aesthetic experience begins.

For the process that follows to be aesthetic, whether it is perceptive or productive, this decision needs to be an autonomous one -- made by each person for himself out of his personal experience of the situation. The artist who decides to make a work of art in a certain style or class because that style is "in," is selling well, or is receiving recognition at the big museums, is not making an autonomous decision. The decision has been influenced by events that are irrelevant to the work of art. However, when a work of art is commissioned, the limitations put on it by the patron are hardly irrelevant. The initiative decision in the case of commissioned work is made by the patron.

In a reality situation between patron and artist, decisions on a commissioned work are often made cooperatively. A good description of such a relationship is given by Henry Adams about his relationship with the sculptor, Augustus St. Gaudens. (1) (Interestingly enough the Adams Memorial is the work St. Gaudens is remembered by.) The decisions made by Adams were important. It is not unlikely that Adams was by far the greater aesthete. It seems probable that St. Gaudens was technically an able sculptor, but not a person capable of great aesthetic decisions. However that might be, it illustrates the area of primary decision-making rather well.

Following the decision that the experience does indeed fall into the classification "aesthetic" the viewer or artist decides, imperceptible or unconscious though that decision may be, to take an aesthetic stance. The aesthetic stance is different from a cognitive stance or a stance that could lead to action and, notably, from a judgmental stance.

Mystical descriptions of what a creative stance is are numerous.

However, Theodore Reik, a non-mystic psychiatrist, describes it as "Listening with the Third Ear". (2) In Reik's profession that means hearing selectively, simultaneously putting together thoughts, ideas, and expressions in a relationship different from the everyday sequence, but relevant in a psychiatric context. J. P. Guilford ascribes to the "creative personality" several characteristics that resemble Reik's description. (3) He says that the creative person has the ability to combine disparate parts into a new unity, to derive many ideas from one, to make links and connections between ideas ordinarily regarded as unrelated, to be at ease with ambiguities, to be interested in the unusual, and the like. Abraham Maslow speaks of many of these same characteristics as belonging to the self-actualizing person. (4)

Both artist and viewer take the creative stance -- one of taking in the material available from as wide a perceptive horizon as possible, exercising an intelligent, relaxed integration of the ideas presented, bringing the total life experience into potential relationship with the aesthetic encounter.

The aesthetic stance is similar for artist and viewer. The artist, however, has an intention of action; he maintains the aesthetic stance throughout the action if all goes well. The viewer assumes the perceptive aspects of the stance. Part of the viewer's aesthetic-perceptive experience consists of following the path of action taken by the artist while making the work of art. The viewer does not follow physical motions except to the degree that eye motions do this -- a minor though essential part of the artist's physical movements. What the viewer follows is the path of the effects of the artist's decisions. Once this is understood it is clear that a viewer does indeed take an aesthetic stance in a sense quite close to that of the artist. Although he need not grasp intellectually exactly what was done by the artist in his craftsman's role, he follows the artist's action in a very real sense with his eyes. What he sees as an aesthetically perceptive viewer is the effect or result of the artist's decisions.

Judgments and feelings often get in the way of taking an aesthetic stance. To approach a work of art with a judgmental stance prevents the viewer from comprehending the aesthetic quality of the unfamiliar and of those things that touch on prejudices or biases. Often a judgmental stance is taken on the assumption of "standards". It used to be said of contemporary art -- and often is still said -- that, "There are no standards any more". This meant a list of correctnesses; pictures should have correct perspective, proportion, and color harmony or they are "wrong". The viewer must take a judgmental stance to decide whether the

work of art is right or wrong. If a work of art makes the person feel uncomfortable it is wrong. That the artist intends to make us feel uncomfortable does not occur to this viewer who is hoping for art that evokes comfortable feelings, not art that challenges feelings.

Jacob Epstein, the British sculptor, tells a story about John Galsworthy's visit to a gallery where Epstein's "Ecce Homo," was displayed. Epstein, an expressionist, shows a suffering figure, emphasizing the physical agony of the event. Galsworthy and Epstein did not know one another. Galsworthy raved against the sculpture calling it blasphemous, ugly, vulgar, cruel, sacrilegious. When he left, the gallery owner apologized to Epstein saying that he would have thrown the man out if he hadn't been Galsworthy. Epstein said, "Not at all, don't apologize. He got the point".

My point is different. Galsworthy did realize, in a way, but not clearly and consciously, that Epstein was pointing out that the incident central to the Christian religion is a cruel and inhumane incident. Galsworthy did not have an aesthetic encounter and he did not take an aesthetic stance. He took a judgmental stance and passed a negative -- probably an ethical -- judgment on the work of art. Though he felt the artist's idea, he did not recognize it, perceive it, or receive it intellectually. Aesthetic perception may begin with feeling, but it does not end there.

The role of feeling in aesthetic encounter is basic. Both artist and viewer as they approach the encounter, one to produce the work of art, the other to consume it, so to speak, need first to experience their feelings -- their emotional reactions -- then to observe those feelings and acknowledge them. It is necessary then to ask: "Are these feelings relevant to giving or receiving whatever communication is intended?" If the emotions are in the way and cannot be "handled" by the artist or viewer no aesthetic encounter can take place. This "handling" probably consists of shelving for future reference or simple recognition that the feeling is not relevant.

That Picasso announced himself to be a communist on several occasions, or that he had several wives and mistresses, are facts that are totally irrelevant to grasping the aesthetic import of a Picasso work. These facts may come to mind, but they can be shelved as irrelevant. This problem is the viewer's.

To parallel this irrelevancy for an artist the example of sentimentality in so-called Western Art might be cited. Quite a few

artists of excellent technical accomplishment have not been able to attain any objectivity over their sentimentality -- an emotional response -- towards the Old West (capital "O" and capital "W"). The resulting incorporation of this sentimentality, a petty emotion, in the work of art causes the production of a work of limited aesthetic appeal -- limited, in fact, to those viewers who share the sentimentality. Emotional incorporations, if they are not sentimental, are aesthetically relevant as, for example, in the Epstein "Ecce Homo".

The manner in which a viewer must suspend judgments and irrelevant emotions and be able to summon relevant imaginings was brought to mind when I met a young woman in a New Mexico cliff dwelling where American Indians, in about 1300, built their home high above a mossy canyon. She looked around in the cave and said, "I wouldn't like to housekeep here". She stayed less than five minutes, not for a moment thinking about nor trying to grasp what life was like in Medieval America. It might not have seemed so sad if it had not been such a difficult climb to get there! The cliff dwellings are art -- architectural art. The person who assumes an aesthetic stance can have an aesthetically satisfying and interesting experience. A vigorous act of imagination, or what I call an active aesthetic stance is required to gain a significant experience.

How does this relate to the art that children do in school? First, to follow the artist's -- sculptor, architect, painter, or printmaker -- decision-making path gives the viewer an understanding, a "live" experience of the work of art. Art needs to be thought of in terms of making decisions leading to action. If children are to understand this they must make the decisions in doing their own art and feel responsibility for what occurs. E. B. Feldman has said that everything humans make has interest simply because humans make it. (5) I would amend that somewhat to say that everything humans make has interest because humans chose to make it, decided to make it, decided how to make it.

Our present purpose is to educate human beings to be capable of making aesthetic decision and to follow the results of artists' decisions in works of art. The immediate need in education is for teachers to understand that art is taught (and learned) by presenting children with choices, helping the child to become a person who chooses -- who acts on free and autonomous choice. A child does not naturally choose at one time from the whole spectrum of school art supplies; neither must a child do the same thing as every other one of a class of thirty-odd youngsters. Viktor Lowenfeld points out the importance of children feeling that their art is their own, but writes only of teachers' interference. The idea of choice for the child does not occur to him. (6)

The crux of teaching art -- I am largely concerned with the philosophy of teaching art in the elementary school -- is that the children feel that they are truly the choosers (of what they will do) and that they feel responsible for the art they do. Teachers in elementary schools need not have extensive art training. After all, the children do the art; teachers need not and should not. Most adults, with a little self-confidence, can do what third- or fourth-graders do. Teachers today do need to realize that art is the exercise of personal autonomy and free choice in the area of visual expression. Anything else simply is not art.

Documentations

1. Henry Adams, Education of Henry Adams, Modern Library, New York.
2. Theodore Reik, Listening with the Third Ear, 1948, Farrar.
3. J. P. Guilford, "Creative Activities in the Arts," Psychological Review, 64, 1957.
4. A. H. Maslow, Motivation and Personality, Harper & Brothers, N. Y., 1954.
5. E. B. Feldman, Becoming Human Through Art, Prentice-Hall, N. J., 1970.
6. Webster, New World Dictionary. Sentimental: 2. affectedly or superficially emotional; pretending but lacking true depth of feeling...

SECTION XXIV
STATE GUIDELINES AND MORAL EDUCATION

DON COCHRANE

I wish to welcome you to what I hope will be seen as the first annual symposium on moral education. There are several reasons for hoping that this organization will show a sustained interest in this field. In the first place, it is of intrinsic philosophical interest: it is the place where ethics -- in one sense a theoretical activity -- meets with the responsibilities of educating -- an immense'v practical undertaking. Second, to introduce the study of moral education into our Schools of Education would be to fulfil a long standing but neglected obligation to our students. In California, at least, the law requires that

Each teacher shall endeavor to impress upon the minds of the pupils the principles of morality, truth, justice, patriotism and a true comprehension of the right, duties and dignity of American citizenship, including kindness toward domestic pets and the humane treatment of living creatures, to teach them to avoid idleness, profanity, and falsehood, and to instruct in manners and morals and the principles of a free government. The California Education Code, Section 13556.5.

With this exhortation we send our students into the schools almost totally unprepared. Third, the field of moral development provides a genuine opportunity for close, careful, interdisciplinary work. Such a necessity has already received institutional recognition in several places: the interdisciplinary Moral Education Research Centre at the University of British Columbia; the conference at the Ontario Institute for Studies in Education in 1968 which resulted in Beck, Crittenden, and Sullivan's Moral Education: an interdisciplinary approach; and the fruitful cooperation of Wilson, Sugarman and Williams at what was formerly known as the Farmington Trust at Oxford. Fourth, I think that this society should be interested in the philosophical aspects of moral education because -- if I read the signs correctly at all -- the area will become one of the major centers of attention by our professional colleagues elsewhere. Finally, in this field there are opportunities in the public sphere for philosophers of education to contribute to the shaping of educational policy particularly in the area of curriculum formation and revision.

The State Board of Education has been faced by the very common problem of translating legal requirements into practice and to this end, has established various committees both to interpret the law and then offer guidelines for implementation. Indeed if the state of an enterprise could be measured by the frequency of its official reports we could be assured of considerable progress towards the teaching of values in California public schools.

First there was the controversial Klotz report of 1969, followed by the extreme, if more ambiguous, Moomaw report of 1970, and more recently, a third drafted by Professors Love and Longaker for the Moral Guidelines Implementation Committee. Despite this flurry of activity, one has the feeling that little has happened except a shuffling of papers. The reasons for such unproductiveness can be placed under three general headings: first, the committees have lacked a clear conception of what is entailed by the notion of moral education; second, even when there has been such an awareness, the members have had to take into account what is politely referred to as the "political realities of education in California"; and third, even if a plan for moral education were devised there is no sense of urgency or commitment on the part of the State to back it with the resources for its development.

Let me focus on the relative impotence of the most recent committee, the Moral Guidelines Implementation Committee and its report drafted by Love and Longaker. To begin they were constrained by a section of legislation in the Education Code (Section 13556.5) which is, at best, unhelpful, and, at worst, positively diverting. Second, the consultants to the Moral Guidelines Implementation Committee had to work within the conclusions of the Moomaw report and within a strict outline provided them by the Committee itself. It is only a slight exaggeration to say that they were commissioned to fill in the blanks.

But there is a third, more informal and more powerful obstacle to an illuminating outcome: the politics of the committee itself. The expediency of what would have been likely to have been passed by such a body could never have been far from the drafters' minds. Their plight is to be compared to those commissioned to write a draft for an imaginary committee on the State of the Universe: passage would depend on pleasing "flat-earthers," 4004 B.C., creationists, atomic physicists, phlogiston fanatics, civil engineers, and so on. To avoid offense, the writers might well abandon scientific inquiry altogether and report at a very high level of generality: the universe is as it is and scepticism to the contrary should be discouraged, all events have a cause and opposing views are alien to our heritage, and continuing experiments demonstrate the truth of the proposition "Everything that has volume has shape". Such an allegory, if playful and, indeed, disrespectful, is not altogether inaccurate when looking at the committees on value guidelines. Reflecting a diversity of philosophical and religious belief is not always a plus factor when one is seeking what is true.

Is there anything positive, then, which has emerged from such inauspicious conditions? I think there is. To begin, there is a shift

over the three reports to an approach which demonstrates greater respect for the autonomy of the student. Love and Longaker specifically and at length rule out indoctrination into values. In a curious omission its predecessors had openly forbidden indoctrination into facts but, through the ambiguities of language, value indoctrination had been left an open question. Instead our new report calls for an open discussion of values and morality so that options can be considered seriously; closed ended approaches are taken rightly to be "alien to the educational process". It is a measure of how far we have come that Love and Longaker are concerned with what is antithetical to educating. While the drafters of the Klotz report feared deviation from what they thought was the American tradition.

Second, their most important recommendation, if acted upon, would affect teachers and administrators throughout the State. They have noted a serious anomaly between the law and practice: legally we entrust to teachers the transmission of values to the young and yet do almost nothing to prepare them for the task. It is an old 'saw' in ethics that 'ought' implies 'can': if a person cannot do something, it is unreasonable to demand of him that he ought to do it. Surely this must be the position of many of our teachers. We hold them responsible for holding a line, even if we send them forward into battle unequipped. So the committee has called for in-service training of teachers in the field, curriculum changes for those in training in schools of education, and perhaps summer workshops for administrators. To implement such proposals would require legislation, money and resources. There are no signs to my knowledge that the means will be allocated. Moral education would be expensive, long range, and potentially controversial: in a phrase it does not have the markings of a political winner!

Finally I would claim that the moral guideline reports do not do even in theory what their title professes: to guide. A minority report to the Moral Guidelines Implementation Committee presented by Mrs. Laurel Martin and Mrs. Barbara Taylor certainly contains a grain of truth: they contended that the guidelines leave moral standards to each individual to decide. My own interpretation of this -- though probably not shared by the dissenters -- is that we have left teachers and students bereft of the concepts, principles and tests for truth by which to go about deciding rationally questions of moral standards. Talk about "fostering intellectual capacities of students to deal with values and moral issues" is altogether too vague. Teachers must know what they are, how they work, what to do in instances of conflict, how to justify decisions, and so on.

Toward a Theory of Moral Instruction

Earlier I suggested that the various public committees and their reports lacked a clear notion of moral education and that in one way and another this had vitiated their efforts. This task of clarification is pre-eminently a philosophical one. I should like to devote the remainder of my paper to sketching out a plausible outline.

There are times when we do distinguish education from socialization, and so by extension moral education from what I shall call value socialization. The two may be contrasted in the following way:

Education

1. would develop depth and breadth of understanding limited only by ability, time, etc.
2. would provide the tools, concepts, tests for truth needed for rational "belief creating"
3. is essentially open-ended
4. leads to autonomy of view on some objective basis
5. belief is granted to a proposition to the extent that there is a basis for it in evidence

Socialization

1. would develop intelligence sufficient for someone to "function" in the society
2. develops those sets of beliefs required to maintain the present state of society and the "fully functioning member"
3. ends are largely presupposed and unquestioned
4. seeks a conformity to a consensus view as shared by the culture
5. belief in a proposition is expected because it is sanctioned by the heritage, tradition, majority, etc.

When this distinction is applied to the field of values, it is safe to say that value socialization is dominant in our schools and that moral education is rare. We have, then, the inculcation of a traditional set of values, the attempt to create conformity around the conventional, and the impression, given by the socialization agents, that the values being transmitted are so transcendently self-evident that questioning them is in some way inappropriate.

This is not the place to chronicle or explain the challenges to this position in the past ten years. In the vanguard of this protest there has been considerable self-conscious anti-intellectualism, self-deception and ultimately solipsism. Proponents argue that each person must "discover his own thing," not adopt an existing tradition; they seek individualism, not conventionalism; values are thought to be personal, not social; subjective not interpersonal. Recognizing a cultural relativism thought to have dangerous consequences, they have withdrawn into individual relativism.

Admittedly, these characterizations are caricatures, but I hope that they are not without their value. As general thrusts in our society, they have had a considerable impact on our schools and the search for alternatives. There may be something for moral educators to learn from both. In socialization there is a stress in the early stages on learning rule-like behavior, developing habits, forming basic character traits, and so on. From those who reacted against such a process, we can note a healthy respect for individual differences and a demand for individual responsibility. However both positions fail to make room for a process of moral reasoning, should such a process be found to exist. Socialization agents fear any loosening on the bonds of certainty and so control, while in the individualists do not accept that there could be arguments of a sufficiently objective nature to be binding on oneself and others.

Now I am aware that one does not create an epistemology by making a conceptual distinction. I cannot move from a distinction between education and socialization to conclude the existence of moral education and value socialization. All that I would be permitted to conjecture would be the general features of what moral education would have to be like to count as educational. This is very different from establishing whether moral education is possible. And for those of us who wish to promote moral education, this is precisely the first task. In contrast with individual and cultural relativism we have to be able to show that there are objective inter-personal principles which are not just the predilections of individuals or particular societies; we have to be able to show that there is a form of moral reasoning, distinctive moral concepts, and tests for the validity of moral assertions; we have to be able to account for differences between reasonable persons without giving away to anarchism; at the same time we must be able to show how the conclusions of moral reasoning are binding on an individual.

I want to claim that the object of moral education is the morally autonomous agent. He is one who conforms not to the conventions of a society, nor to the urgings of his idiosyncratic inclinations, but to

the dictates of moral reason. Such a capacity enables the agent to generate moral imperatives. It is because of this element in moral experience that we can speak of objective constraints on what is morally possible and objective obligation towards what is morally necessary.

Let me sketch a possible schema of moral reasoning.

Figure A
Components of Moral Reasoning

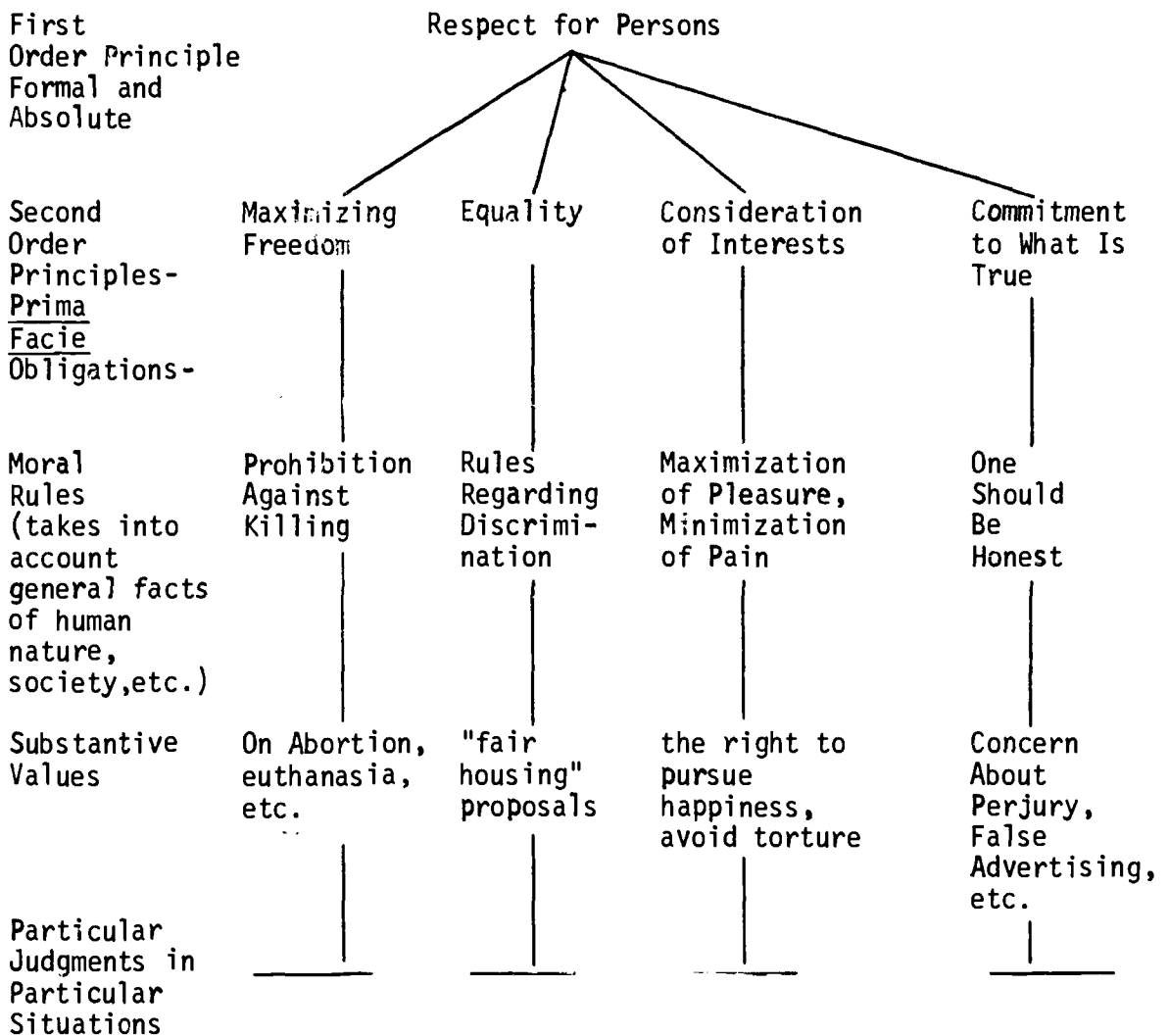
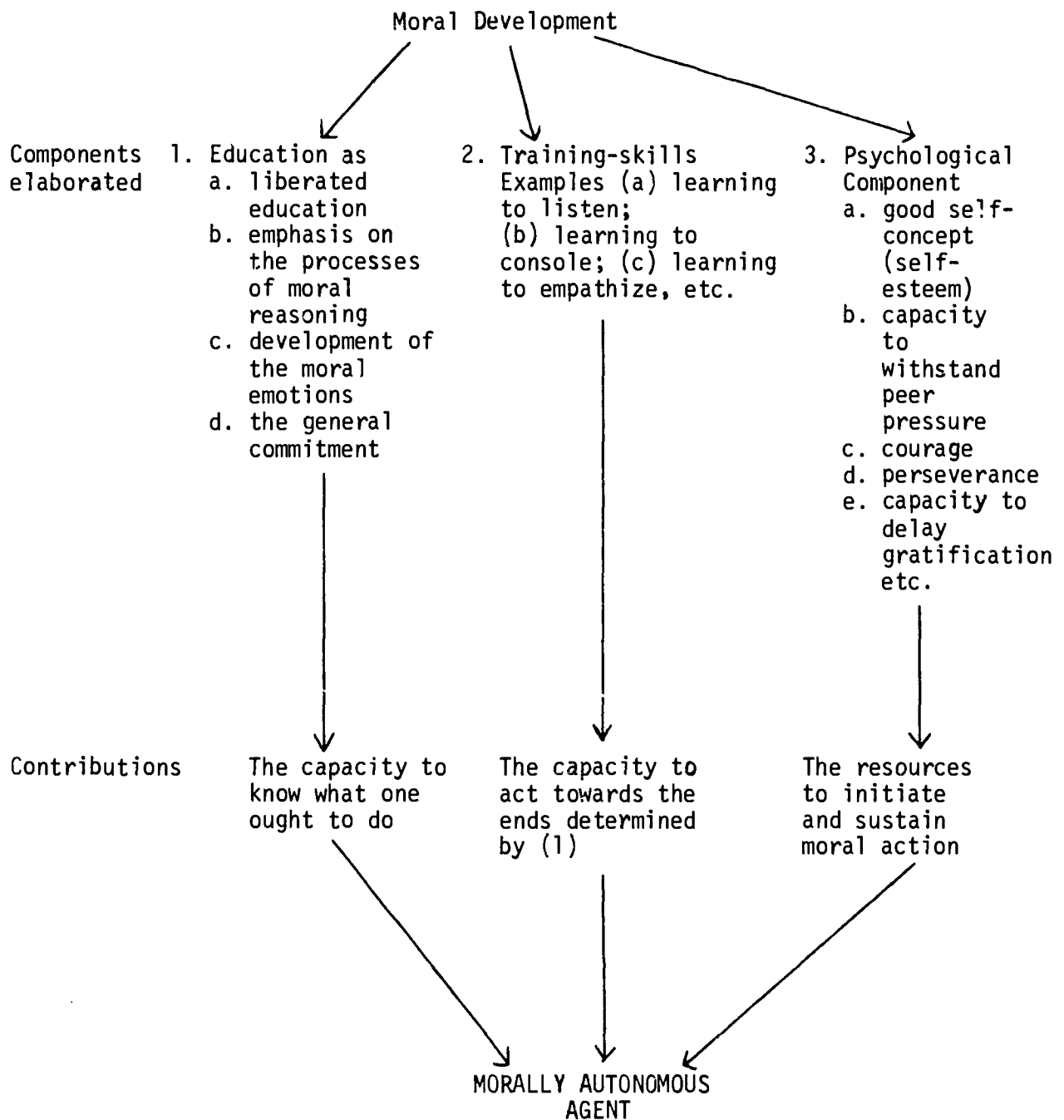


Figure B



I would argue that respect for persons is the absolute, though formal, first principle of morality. If that is not the bedrock of one's concern, then whatever else one is thinking, feeling and acting, it is not moral thinking, feeling and acting. To explicate the meaning of the formal principle and to outline our general orientations toward human beings, we need second-order, prima facie, obligation-generating, principles such as the commitment to maximize another's freedom to treat all equally, unless there are relevant differences, to consider the interests of persons, to seek and transmit that which is true. Such principles, I would claim, are objective, but not absolute; they provide a framework for and the principles of moral reasoning; however, as they are not absolute, there can be conflicts of principles, the problem of balancing, and even disagreement within oneself and with others. Surely without some such account, the notion of an ethical dilemma would be unintelligible.

Next in moving in our analysis from the formal to the concrete there are devised moral rules which encourage, permit or prohibit classes of action, which take into account in their formulation general facts of human nature, and which find their justification in an appeal to one or more of the second-order principles. Let me illustrate with one example: Thou shalt not kill. Such a rule is predicated on the rather wide-spread phenomenon of man's vulnerability and mortal nature. Further, it is thought that inflicted death is not, in general, in another's interests, but more important, death tends to minimize another's freedom, and, as such, shows disrespect for persons. Of course, if the world were different, i.e., if man were not mortal, then, I suppose, there could be no injunction against killing.

Closely related to moral rules are substantive values on what we call "issues" which are frequently of a social, political or economic nature. Though in the first instance we appeal to moral rules for justification, we must take into account a complex of sociological, medical, technological, etc. facts. Thus moral discussions about abortion revolve around technical, medical matters as well as the prohibition against killing and the nature of a person. Finally, we must make a judgment in this situation, which, though it may share many of the general features of the other levels of moral reasoning, may throw up specific features not covered. The application of rules is not always mechanical. As Oakeshott is fond of reminding us:

What is required in addition to information is knowledge which enables us to interpret it, to decide upon its relevance, to recognize what rule to apply and to discover what action permitted by the rule should in the circumstances, be

performed. Knowledge (in short) capable of carrying us across those wide open spaces, to be found in every ability, where no rule runs. For rules are always disjunctive. They specify only an act or a conclusion of a certain general kind and they never relieve us of the necessity of choice. (M. Oakeshott, "Learning and Teaching," The Concept of Education, ed. by R. S. Peters, p. 168.)

This, then, is a sketch, not a proof, of a possible theory of moral reasoning. Intuitively, it would seem to meet the conditions of a moral theory, outlined earlier. On examination, my argument might be found to have a fatal incoherence, but if so, another then of a similar type will have to be constructed if moral education is to be possible.

In my sketch of the components I have not intended to convey the impression that (a) moral reasoning is all that there is to moral development; (b) or even that my account, if correct, would exhaust the kinds of reasoning in moral matters

My view would be that what I have identified are the distinctive characteristics of reason in moral matters, but that other forms of reasoning are also used. Further there is much more to moral experience, and hence moral development, than the different forms of reasoning.

I would like to conclude my paper by locating moral reasoning on the map of moral development (See Figure B). It would seem to me that we can best get at the dimensions by analyzing the notion of the moral autonomous agent, and this can be set out profitably under the headings of three general components:

1. educational
2. training
3. psychological

The educational component would develop the capacity to know what one ought to do. The necessary conditions of arriving rationally at such understanding would be

(a) a liberal education which would develop and broaden one's understanding of the contexts within which moral problems arise;

(b) a special emphasis on the processes of moral reasoning (as outlined earlier in this paper);

(c) the development of the moral emotions and dispositions (such as benevolence and generosity, guilt, shame, sympathy, compassion, love for one's fellow man, conscientiousness, a sense of integrity, etc.);

(d) and a generalized commitment to the point of the moral life such that the moral understanding leads to moral action.

Coming to such an understanding, however, and translating it into action (even with the commitment) might not be possible without having been trained into certain skills. Examples might include learning how to listen, to console, to empathize, plus a whole range of action skills which, although not specifically moral, would be of service to the moral agent.

Again, however, the capacities of knowing what one ought to do, and to be able to act towards these ends might still be insufficient equipment for a moral agent: he would still need the psychological resources to initiate and sustain moral action. Let me give you examples of what I have in mind:

(a) a good self-concept (for considerable self-doubt would erode the confidence that one could act efficaciously);

(b) the capacity to withstand peer and authority pressures;

(c) courage;

(d) perseverance;

(e) the capacity to delay gratification.

Thus it seems to me that moral development is an immensely complicated business. The elements are many and disparate, their inter-relationships subtle and varied. There is important and interesting work for philosophers of education to be doing in the immediate future.

SECTION XXV
PRESIDENTIAL ADDRESS

FUTURES:
A PROCEDURAL QUESTION

T. FRANK SAUNDERS

Philosophy forgives us the audacity of which her inquiry has prompted us to be guilty.

Philosophers, Ladies, and Gentlemen:

How does one give a presidential address? Your answer would probably be: "Briefly, I hope". I agree.

We can talk of issues past. We can evaluate what we are now doing. We might look to the future of our profession in the framework of predictions that various technicians in subject matter areas make for the next 50 to 100 years.

Since the theme for this conference is futures, I for one would prefer to share with you our mutual future rather than itemize our pasts which are individualized and our presents which are disjointed. From moment to moment we, you and I, can plan and in these plans find a common meaning. We can plan and re-plan our next step. Today and yesterday are not flexible and offer us no variations. Our past is disposable while our futures are re-usable.

This does not mean that we give up nostalgia nor does it mean we forget our friends and past glories. It implies only that we renew our futures together, our plans together on a continuing basis. We must join in a partnership to construct the kinds of futures which will make our todays as well as our yesterdays more meaningful.

What is the future? Is it trend extrapolation? Is it a combination of the probable and the accidental? Do we think of the future as the development of a new consumerism or as an epic disaster for ecology and freedom? Where do we in the philosophy of education fit into the shape of things to come? Let us share some observations:

Man's tomorrows are hostages to the clarity by which they are deliberately or methodologically known.

What are some of the ways future can be defined?

1. We can simply predict a cause-effect relationship between the past and the future. The future is then an extrapolation line from then through now to when. On these grounds the more clearly we analyze the past the more precisely we can predict the future.

2. The future can also be defined as some combination of

expectation and accident. We will plan to develop what is available and be pleasantly surprised by the unexpected in our lives. Some believe that science discoveries come about by this kind of fortuitous serendipity.

3. The future can also be seen as a matter of method. Here man's future would not be contingent upon his past nor his present. C. S. Peirce once said that "the truth will be that to which the method of science will arrive, if everyone adopts its methods, in 2,000 years".

On what grounds can we decide to define the future one way or another? Each definition has adherents. Each definition offers a direction to be taken in preparation for the future.

The question of course seems to be whether or not man can ever not do futures. Man seems to be an inveterate planner. Can he ever not plan? We often place man behind his plans as in: "Man is a plan-maker or a symbol user". The problem seems to arise when we look to see "how far" behind the plans and symbols man is.

The main point is I think that it doesn't matter how we define the future, it remains that man cannot be human without continual futures. Which future he will construct, the models he will employ, and how he will decide on any particular future seem to be the crucial problems.

How can we in the philosophy of education as professional educators participate and contribute to futures? Do we merely offer one more plan to the existing predictions? Do we help scientists make their diverse expectations clearer? Do we try to draw a pervasive thread through the different ideas and plan the interdisciplinary ramifications that will emerge if all predictions about the future come to pass?

I would like to think that initially our major task is one of integrating the different futures that can be anticipated into a unified pattern. That we can help clarify any value conflicts that come up and help lay the groundwork for a partnership in future values. The future is ours as a group. The present and the past belong only to individuals who can mine their memories for matters of personal relevance.

Can we come by a public mind, a group intelligence, a publicity of knowledge without an integrative base from which to proceed?

Must the future be our last 10,000 years? Or can we build it now? Can we construct the future in a way that will help it become an agent of its own realization? What are some of the problems?

The only thing we can be sure of about the future is the planned chaos, and instantaneous obsolescence. When we look to see who is in charge of pulling together ideas in science and religion, political and military matters we notice that the future is first without a driver but what is worse it is without a concerted value. We may never know when we get there.

Consider for a moment some of the probability occurrences for the next fifty years. Will we know when any of these mean something together?

Startling new biological options will undermine our conventional ideas and remove the dialectic between the past and the future. For instance some of the following developments are already upon us:

- drug modifications of personality.
- cyborgs-alpha wave contact with computers electronic inserts.
- chemical education.
- genetic engineering.
- cloning.
- cyro-genic suspension of human life.
- spontaneous generation of life.
- unisex.
- physiological modification for existence in unusual environments.
- gill-men.
- deep space survival without life support systems.
- hybrids of human and infra humans.
- group minds.
- electronic bliss.

In History we can expect:

- thought detectives.
- retroactive programming.
- memory mining.

In Physics:

- holography.
- mechanical feedback intelligence.
- enclosed artificial environments for cities.
- teleportation.
- sub-space mobility.

anti-gravity.
 molecular feedback.
 indeterminacy made determinate -- unified field theory.

In Sociology:

group minds.
 crisis feedback.
 computer parents.
 unisex families.
 ruralization of thought

Economics:

typological thinking will gain way over population thinking.
 leisure threat actual.
 colonization of sea floor.
 change in monetary base and medium of exchange.

Communications:

alpha control and computer connection-cyborgs.
 sentient vegetables.
 telepathy.
 telekenesis.
 extra terrestrial contact.
 sense crossing -- specific nerve energy overlap.
 shorthand speech -- extensive use of acronyms.

In this sketchy outline of some probable developments what can we see as the distinctive task of philosophy of education?

We all know what we are doing now. All we need to do is place our task in a parallel position to the framework of predictions others give us. What will we be called in 2051, our centennial year:

Cross-impact analysts?
 Prediction integrators?
 Dreamers?
 Future programmers?
 Futurists?
 Predictographers?

Will we change our function or merely our allegiance? As new

technological devices become available will we continue to try to stretch their meanings? Will we have carved out our part of the thought turf and established an isolated territory? "Where will the good people go?"

I would not like to answer these questions. The definition of a field as foundational as philosophy of education is not likely to change substantially over the years. We deal in:

- abstractions.
- analogies.
- values.
- criteria for criteria.
- human meaning.
- contextualization.
- interdisciplinary ideas.

This focus is not likely to change. We will change only to the extent that we now find our primary meaning in specific content. Aforeseen consequences puts the future in your pocket today.

In terms of educational implications we can only hope that our influence on students helps prepare them to live in any world, meet all varieties of denizens, solve and create as yet unstateable problems. We must educate students so they can know what kinds of ideas they cannot have. Knowledge must be a skill and not a content, used as a process and not a result of a process. It must be a procedure and not a thing to be had.

The future will remain a strange kind of value imperative whose progeny are the present.

You have been patient with me. I appreciate this chance to stand before you as the president of the F.W.P.E.S. I would like to thank all of you who have made the many arrangements and worked with the details of this meeting.

RESPONSE

JOHN J. O'FARRELL

As an opening gambit to Dr. Frank Saunders' Presidential Address: "Futures: A Procedural Question," let me pause momentarily on the word w o n d e r. I am wondering why I was asked to make this response, and perhaps you are also wondering why. While there are many meanings to the word wonder, I chose one that says -- wonder is the horizon of wisdom. As you are wise people or engaged in the pursuit of wisdom, it is natural for you to wonder. Continue to do so, and, by the time this response is concluded, Dr. Saunders perhaps will wonder anew.

While all of you have your own chess boards and may make different moves, my second move is to announce in this ecumenical decade of renewal that I live in a glass house and do not intend to throw stones. We are all limited, imperfect human beings and we live in an imperfect world. We need each other's insights and sensitivities the better to communicate and to face the future with hope, trust and love.

My next move may be difficult to explain. It may be construed as a defensive move or it might be an attack stratagem. First of all, it seems that Dr. Saunders' presentation is a digest or an encapsulation of his on-going, ever-developing structure that he uses to manage the data, problems and principles of the reality of philosophy, education and the philosophy of education -- as they extend into the future. It would be rather gauche on my part to attempt a digest of a digest. Furthermore, I presume that Dr. Saunders and his auditors are more interested in a feed forward rather than a feed back. Hence the next moves may appear to be the advancement of a number of antinomies that may result in a partial clearing of several black and white pieces from the board.

Unless philosophers of education abandon their exclusive polarizations, dialog away their impotent differences and discover common meanings, then the future may reveal further alienation from reality and from the common bond of being. I am thinking here of the majority of 30 groups of over 200 each Ed. D-s who from exposure to it have either hated or still worse ignored Philosophy of Education. Incidentally, I am not talking down my nose at this audience or any other audiences. Radical shifts have occurred at my own institution and are open to sharp questioning and severe criticism. But this is not the place or time to engage in a T. A. Harris transactional analysis -- I'm O.K., You're O.K.

Unless philosophers of education embrace all of the dimensions of man and communicate with theologians, metaphysicians, social and natural scientists and creative intuitionists, then the future may reveal a dehumanized further reductionism from being to knowing, to doing, to feeling, to operant conditioning a la G-I -- G-O computer technology which

will imperil if not destroy man's freedom and dignity. I am thinking here of B. F. Skinner's Beyond Freedom and Dignity and Bernard Lonergan's books on Insight and Method.

Unless philosophers of education learn more about the origin, nature and destiny of human beings and about self-transcendence, then the future may reveal a deeper identity crisis and the multiplication of more meaningless and confusing ideologies. I am thinking here of Gilson's Unity of Philosophical Experience, Adler's On The Condition of Philosophy, Collins' God in Modern Philosophy, and Miceli's The Gods of Atheism.

Unless philosophers of education resist the parricidal tendency to deny all the historical influence that perdure in and help to explain the present, and unless they back off from an exclusive pre-occupation with the progressively atomized NOW, then the future may find them suffocating in the embrace of their own sensate ego and condemned to selling ideological disposal units. I am thinking here of Sorokin's The Crisis of Our Age, and that 6 million dollar, 30 volume Carnegie Report on Higher Education.

Unless philosophers of education immediately face up to the problems of morality and values and the presuppositions behind them, then the future may find them enslaved by systems analysts working for international conglomerates that exploit the statistical mass as human pawns in their dehumanized power plays. I am thinking here of five years of reports from the Center for the Study of Democratic Institutions.

Unless philosophers of education can escape from the trap of an exclusive evolutionary naturalistic process and the Heraclitean absolute that change is the only reality and that any and all human beings are simply tensional points of relation in a monistic mass of evolving change, then the future may reveal what Jonas Salk refers to in his latest book: The Survival of the Wisest -- the survival of those who have followed or who have been engineered to follow the biological model of a constellation of sub systems with multiple loop feedbacks that would produce immunity from everything except death. Who wants to be immunized from the profoundly human and the divine?

One cannot but wonder at Saunderian procedures which are at least analogous to "growth for the sake of growth". Growth of what and toward what, we have been told, are really unreal questions because there are no answers -- just evolving procedures!!

By way of terminating these observations let me say that, having spent 54 years in formal learning and in teaching -- 28 of them in

philosophy and philosophy of education and 18 years in the Far West Philosophy of Education Society, I do not wish to imply that so-called philosophers of education should be masochistically blamed for all the evils of the world and the confusion in education. All institutions and organizations periodically become over-structured, over-legalized, over-congealed in their functions. I hope and pray for a Second Spring, and I have faith in the future which will belong only to those who humbly yet confidently prepare for it in a spirit of universal love. Let us continue to wonder.

APPENDICES

APPENDIX A

OFFICERS

President. Dr. T. Frank Saunders, University of Arizona,
Tucson, Arizona 85721.

Vice President. Dr. Hugh C. Black, University of California,
Davis, California 95616.

Secretary-Treasurer. Dr. Robert Bruce McLaren, California State
University, Fullerton, California 92634.

Representative. Dr. Leonard Fels, California State University,
Long Beach, California 90804.

Representative. Dr. Helen Isabel Nicklin, California State
University, Los Angeles, California 90032.

Editor. Dr. James John Jelinek, Arizona State University,
Tempe, Arizona 85281.

APPENDIX B

HISTORY

The Far Western Philosophy of Education Society was founded December 29, 1952. It has held annual meetings in December as follows:

- 1952. Stanford University.
- 1953. University of Southern California.
- 1954. Stanford University.
- 1955. Loyola University of Los Angeles.
- 1956. Fresno State College.
- 1957. Mt. San Antonio College.
- 1958. Sacramento State College.
- 1959. University of California at Los Angeles.
- 1960. San Francisco State College.
- 1961. Los Angeles State College.
- 1962. Fresno State College.
- 1963. Arizona State University.
- 1964. California State College at Hayward.
- 1965. San Fernando Valley State College.
- 1966. University of Santa Clara.
- 1967. University of California at Santa Barbara.
- 1968. University of San Francisco.
- 1969. California State College at Fullerton.
- 1970. University of Southern California.
- 1971. Arizona State University
- 1972. California State Polytechnic University.
- 1973. University of California at Davis.

Officers of the Society have included the following:

1953-53. Robert L. Brackenbury, President. Lawrence G. Thomas, Vice President. Lester B. Sands, Secretary. Arthur B. Fallico, Board Member. Darrell F. X. Finnegan, Board Member.

1953-54. Lawrence G. Thomas, President. Darrell F. X. Finnegan, Vice President. Joe Apple, Secretary. Morris Bigge, Board Member. Samuel Burkhard, Board Member.

1954-55. Darrell F. X. Finnegan, S.J., President. Morris L. Bigge, Vice President. Willard W. Smith, Secretary. Thomas Hunt, Board Member. Frederic Lilge, Board Member.

1955-56. Morris L. Bigge, President. Thomas Hunt, Vice President. Glenn Austin, Secretary. George F. Kneller, Board Member. Daniel McGloin, Board Member.

1956-57. Thomas C. Hunt, President. Willard W. Smith, Vice President. Clyde V. Martin, Secretary. Glenn Austin, Board Member. Arch Lang, Board Member.

1957-58. Glenn Austin, President. Willard W. Smith, Vice President. David Ferris, Secretary. Keith Oakes, Board Member. John J. O'Farrell, Board Member.

1958-59. Willard W. Smith, President. George F. Kneller, Vice President. Arch D. Lang, Secretary. Stephen Alley, Board Member. Daniel McGloin, Board Member.

1959-60. George F. Kneller, President. Arch D. Lang, Vice President. Wilbur F. Murra, Secretary. John J. O'Farrell, Board Member. Maurice P. Hunt, Board Member.

1960-61. Arch D. Lang, President (to May 1961). Joe Apple, Vice President. Julian Roth, Secretary. Louis Fischer, Board Member. M. Rose Emmanuella, Board Member.

1961-62. Julian Roth, President. Maurice P. Hunt, Vice President. Louis Fischer, Secretary. Wilbur Murra, Board Member. Herman Yeager, Board Member.

1962-63. Maurice P. Hunt, President (to November 1963). Wilbur F. Murra, Vice President. Herman V. Yeager, Secretary. Richard Dettering, Board Member. Daniel McGloin, Board Member.

1963-64. Clyde E. Curran, President. Herman V. Yeager, Vice President. Gerald McDonald, Secretary. Lester B. Sands, Board Member. Louis Fischer, Board Member.

1964-65. Herman V. Yeager, President. Louis Fischer, Vice President. Gerald McDonald, Secretary-Treasurer. Wayne Hill, Board Member. William O'Neill, Board Member.

1965-66. Louis Fischer, President. Gerald McDonald, Vice President. William O'Neill, Secretary-Treasurer. Father O'Farrell, Board Member. Lester Sands, Board Member.

1966-67. Gerald McDonald, President. Lester B. Sands, Vice President. Kenneth Lottich, Secretary-Treasurer. John J. O'Farrell, Board Member. Lloyd Scritchfield, Board Member.

1967-68. Lester Sands, President. John J. O'Farrell, Vice President. James J. Jelinek, Secretary-Treasurer. Bernice Goldmark, Board Member. Frank Saunders, Board Member.

1968-69. John J. O'Farrell, President. Morton Fierman, Vice President. James J. Jelinek, Secretary-Treasurer. Clyde E. Crum, Board Member. Leroy Troutner, Board Member.

1969-70. Morton Fierman, President. William O'Neill, Vice President. James J. Jelinek, Secretary-Treasurer. Hugh C. Black, Board Member. Edwin Carr, Board Member.

1970-71. William O'Neill, President. James J. Jelinek, Vice President. Robert Bruce McLaren, Secretary-Treasurer. Thomas A. Reed, Board Member. Leonard Fels, Board Member.

1971-72. James John Jelinek, President. T. Frank Saunders, Vice President. Robert Bruce McLaren, Secretary-Treasurer. Homer Bronson, Representative. Wayne Hill, Representative.

1972-73. T. Frank Saunders, President. Hugh C. Black, Vice President. Robert Bruce McLaren, Secretary-Treasurer. Dr. Leonard Fels, Representative. Helen Isabel Nicklin, Representative.

APPENDIX C

PROGRAM

THE FAR WESTERN PHILOSOPHY OF EDUCATION SOCIETY

Twenty-second Annual Meeting

December 7 and 8, 1973

Burlingame-Hyatt House
San Francisco, California

FRIDAY, DECEMBER 7, 1973.

12:00 to 3:00 p.m., Friday.

Registration.

Lobby Mezzanine.

1:00-2:30 p.m., Friday.

General Session.

Pasha Room.

Chairman: Maurice P. Hunt, California State University at Fresno.

Welcome: T. Frank Saunders, University of Arizona. Paper: Hugh C. Black, University of California at Davis, "The Future of Philosophy of Education: Overcoming the American Way". Paper Summarizer: F. A. Guerard.

2:30-3:00 p.m., Friday.

Break.

3:00-5:00 p.m., Friday.

Concurrent Sessions.

Session A.

Pasha Room.

Chairman: James John Jelinek, Arizona State University. Paper: Robert J. Rossi, Stanford University, "Analytic Responsibility: Ours or Theirs?" Paper: Robert Bruce McLaren, California State University at Fullerton, "Value Considerations in Science Education". Paper: James Romig, Whittier College, "The Future of Educational Philosophy and the Rise of Social Science".

Session B.

Marquee A.

Chairman: Robert Brackenbury, University of Southern California. Paper: William F. O'Neill, University of Southern California, "Educational Philosophy: Some Cautionary Notes and Qualifications". Paper: Donald S. Seckinger, University of Wyoming, "Martin Buber and the One-Sided Dialogical Relation". Paper: Lawrence L. Kavich, California State University at Los Angeles, "Philosophical Guidelines on the Future Educational Administration".

5:30-7:00 p.m., Friday.

Reception.

Marquee D.

7:00-9:00 p.m., Friday.

Banquet.

Marquee D.

Toastmaster and Chairman: Hugh C. Black, University of California at Davis. Presidential Address: T. Frank Saunders, University of Arizona, "Futures: A Procedural Question". Respondent: John J. O'Farrell, Loyola University.

SATURDAY, DECEMBER 8, 1973

9:00-10:15 a.m., Saturday.

Concurrent Sessions.

Session A.

Pasha Room.

Chairman: T. Frank Saunders, University of Arizona. Paper: Morris Bigge, California State University at Fresno, "Behavioristic Eclecticism: A Deleterious Antithesis to Educational Philosophy". Paper: Maurice P. Hunt, California State University at Fresno, "Taxonomizing Educational Objectives: Some Questions about the Approach of Benjamin Bloom and Associates".

Session B.

Marquee C.

Chairman: Hugh C. Black, University of California at Davis. Paper: John Paul Strain, "Idealism: A Clarification of an Educational Philosophy". Paper: John B. Connely, California Polytechnic State University, "Reading as a Semantic and Epistemological Problem: Implications of Certain Basic Assumptions about the Nature of Reading".

10:15-10:45 a.m., Saturday.

Break.

10:45-12:15, Saturday.

Concurrent Sessions.

Session A.

Pasha Room.

Chairman: Gerald McDonald, University of Santa Clara. Paper: Bernice Goldmark, California State University at Sonoma, "Magister Ludi for the Twenty-first Century". Paper: James John Jelinek, Arizona State University, "A Futurological Analysis of Exosomaticism". Paper: Joseph Engle, University of Arizona, "The Future: Assumptions and Conditions of Meaning".

Session B.

Marquee B.

Chairman: Morris Bigge, California State University at Fresno. Paper: Darold R. Beckman, Whittier College, "The Limits of the Model of Relativity by Physics for Understanding Educational Philosophy". Paper: Colleen Decker, University of Arizona, "Symboling: Thinking, Culture, and Alternative Assessment". Paper: Jack Pitt, California State University at Fresno, "Much of the Future will be Like the Past".

Session C.

Marquee D.

Chairman: Thomas A. Reed, University of San Francisco. Paper: Leonard Fels, California State University at Long Beach, "Ethics, Reality, and Education: The Parmenidean Error." Paper: Catharine Phillips Fels, California State University at Los Angeles, "The Development of the Capacity for Aesthetic Reaction Through Autonomous Choice".

12:30-2:30 p.m., Saturday.

Luncheon.

Main Dining Room.

Business Meeting.

3:00-4:15 p.m., Saturday.

Concurrent Sessions.

Session A.

Pasha Room.

Chairman: Donald S. Seckinger, University of Wyoming. Paper: Don Cochrane, California State University at Northridge, "State Guidelines and Moral Education". Paper: Lawrence W. Byrnes, California State University at Northridge, "Textbooks and Teaching Democracy: Political Education and Indoctrination". Paper: Michael Parsons, University of Utah, "Moral and Aesthetic Reasoning". Paper: Samuel Burkhard, Arizona State University, "Industrial Education and Democracy". Paper: William McGowan, California State University at Long Beach, "The Illusion of the Future".

4:30-5:30 p.m., Saturday.

Pasha Room.

General Session.